# U. S. Coast Guard
# Marine Safety and Environmental Protection

# Business Plan

# FY2001-2005

UNITED STATES COAST GUARD
MARINE SAFETY AND ENVIRONMENTAL PROTECTION DIRECTORATE
WASHINGTON, D.C.
AUGUST 2000

Incorporates Change (1) 19 January 2001

# *Table of Contents*

# U. S. Coast Guard
# Marine Safety and Environmental Protection

# Business Plan

# FY2001-2005

# Part I - Preamble

a. Purpose

b. Program Mission, Vision, Values

c. Program Description

d. Core Program Strategies

e. Organizational Description

f. Program Descriptions

g. Plan Contents

### *a. Purpose*

The purpose of this Business Plan is to provide a national framework for current and future program operations, document program expectations and objectives, clarify and focus operations on measurable outcomes, manage resources, and provide a benchmark to measure performance. The plan is written for two principle audiences, the **Coast Guard Chief of Staff**, and **G-M Directors and Office Chiefs** to document five year national strategies and resource requirements aimed at accomplishing the Strategic Goals of **Safety**, **Protection of Natural Resources, Mobility,** and **Security**.

The plan also includes capability goals, which are related to our internal capabilities that must function optimally to enable fulfillment of our operational mission. Capability goals include **Risk Management, Human Resources, Information Resource Management, Partnerships,** and **Activity-Based Cost Management**. The strategies contained in this plan directly support the Commandant's Mission, Vision, and Values, along with the three organizational priorities of:

- ***Restoring Readiness***
- ***Modernization***
- ***Workload Management***

The future operating environment is one of no budget growth, less public tolerance for risk and/or accidents with current trends showing an increase in world trade, domestic commuter high speed ferries, recreational boating usage, larger faster cargo ships, and growth in grain/coal exports and the towing industry. This Business Plan illustrates the broad range of services that the Marine Safety and Environmental Protection program provides to the American public. These services directly enhance the national interest by improving economic trade and vitality, protecting the environment and natural resources, and ensuring safe and efficient maritime transportation. This plan establishes what the Marine Safety and Environmental Protection program intends to achieve and describes the linkage between our mission, strategic goals, performance goals, strategies/activities, and budget request.

### *b. Program Mission, Vision, Values*

The ***mission*** of the Marine Safety and Environmental Protection *Program* is to,

***Protect the public, the environment and U.S. economic interests through the prevention and mitigation of maritime incidents…***
***"Protecting people from the sea, and the sea from people."***

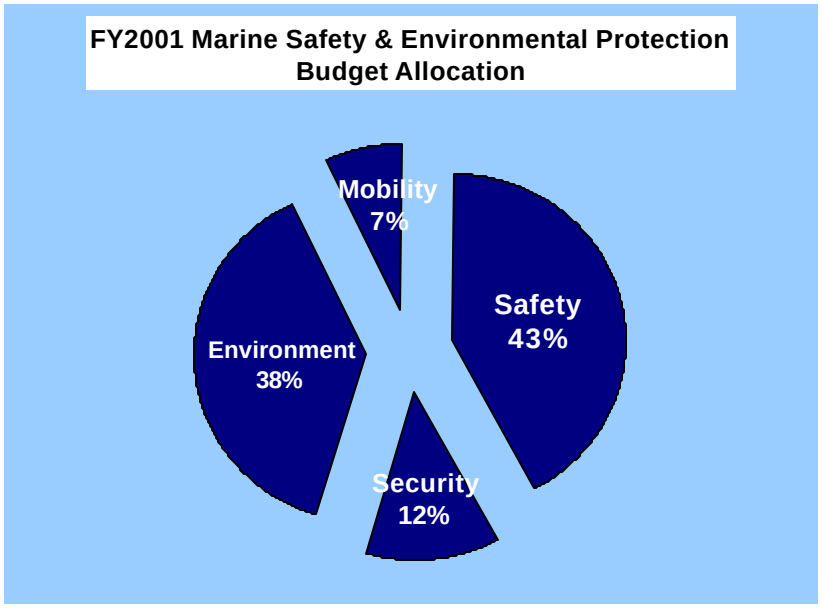
With honor, respect and devotion to duty central Coast Guard ***values***, the view of the Marine Safety and Environmental Protection program today and into the future is stated in our ***Vision Statement*** as

***Valued maritime professionals leading the world to meet the marine transportation challenges of the 21st century.***

## *c. Program Description*

The Marine Safety and Environmental Protection Program accounted for $866.3 million of the Coast Guard's FY01 Operating Expense (OE) and Acquisition, Construction and Improvements (AC&I) budget and over $4 million of its Research and Development (R&D) project budget. Personnel assigned to the program in FY00 include approximately 3,502 military and civilians. Headquarters, Areas and Districts staffs, specific Headquarters Units, and 52 field units perform program functions and provide specific products and services in support of program goals.

The following graph shows allocation of the Marine Safety (MS) and Marine Environmental Protection (MEP) portions of the Coast Guard budget.[1] In FY2001, this is equal to a combined total of $866.3 million.




[1] Based on labor information from the Activity Based Cost Management (ABCM) study of 1998. This includes activity distribution information based on a pilot project at two field units. The distribution does not account for the different distribution of activity costs that exists at Coast Guard Headquarters, or at Headquarters units. An earlier report of the ABCM study (1997) provides information similar to the 1998 report, but was based on a labor survey of Headquarters, Headquarters units, and field units. While the activity dictionary was greatly expanded between 1997 and 1998, the general distribution of activity costs at Headquarters and Headquarters units is illustrative. This study showed the relative distribution of activity costs as compared to our mission goals is very similar when Headquarters and Headquarters Unit data are added to that of the field units, i.e., the differences are negligible for business planning purposes. The largest differences between Headquarters and field activity cost distribution models are seen in the cost per activity. By definition, Headquarters and Headquarters Units spend much fewer dollars performing operational activities. For example, the sub-activity "Perform Vessel Inspection" accounted for 18.4% of the MS and MEP combined budget using the activity information from the 1998 ABCM study. In contrast, using the 1997 study, where Headquarters, Headquarters Units, *and* field units were surveyed, the activity "Conduct Vessel Inspection" accounted for 8.6%. Thus, in operational activity areas, consideration of staff elements serves to balance and level the cost information.

The Marine Safety and Environmental Protection mission is carried out by various organizational elements. ***Headquarters program managers*** are responsible for policy development and coordination, identifying and allocating resources, training and workforce management, technology management, and program performance monitoring. ***Area and District offices*** provide coordination and policy guidance on a regional level to assist headquarters and subordinate field units. ***Field units*** are principally responsible for executing mission activity in accordance with program policy guidance and regulations. A feedback loop back to headquarters program managers is provided through regular communications, Marine Safety Officers Conferences, and through the Regional Strategic Assessments.

### *d. Core Program Strategies*

Since 1995, three management principles have served as core strategies for how we pursued national performance goals. Managers at all levels of the program use these three strategies to focus the base of program functions. Our performance success since 1995 can be attributed in part to these strategic approaches. The core strategies, ***risk management***, ***prevention through people***, and ***quality partnerships***, are discussed below.

To effectively implement these core strategies we need to build capabilities in our workforce. **Section IV** of this plan details the goals, background and strategies for building these important capabilities.

***Risk Mangement***

Risk management is our business. Because our resources are limited, we must treat different levels of risk differently. Risk management involves choices about how, and to what degree, we will try to reduce the incidence and/or consequence of potential harmful events. Preventing low probability - high consequence events, such as major loss of life on passenger vessels, and the medium and major oil spill, is a cornerstone of our risk management strategy. To improve our decision making, we need to strike a balance, allowing field commanders to employ existing risk analysis tools for routine risk management decisions, while establishing a formal program policy for high level risk analysis projects, such as comprehensive port risk models. In 1997, Guidelines for Risk Based Decision-Making was published to help managers use risk management tools and strategies. We will continue to revise and improve these guidelines to allow managers to achieve success toward reaching our goals.

***Prevention through People (PTP)***

Preventing marine accidents is the primary aim of our program. The "human element" plays a major causal role in marine casualties - often cited as contributing to 80% of all accidents. In the past we emphasized monitoring the material condition of ships and facilities, with less focus on the people and operational processes. With great gains already achieved in the safety of equipment and material, exploring the human element in marine operations offers new opportunities to prevent accidents.

PTP is a primary strategy of the program, aiming to change the culture of marine organizations so that all stakeholders recognize that safety is good business. In 1996, the PTP master plan was published, implementing Prevention through People throughout the program. The implementation plan harnesses all major program functions and initiatives to the PTP strategy, signaling the Coast Guard's commitment to change the culture of organizations involved in maritime operations.

***Quality Partnerships***

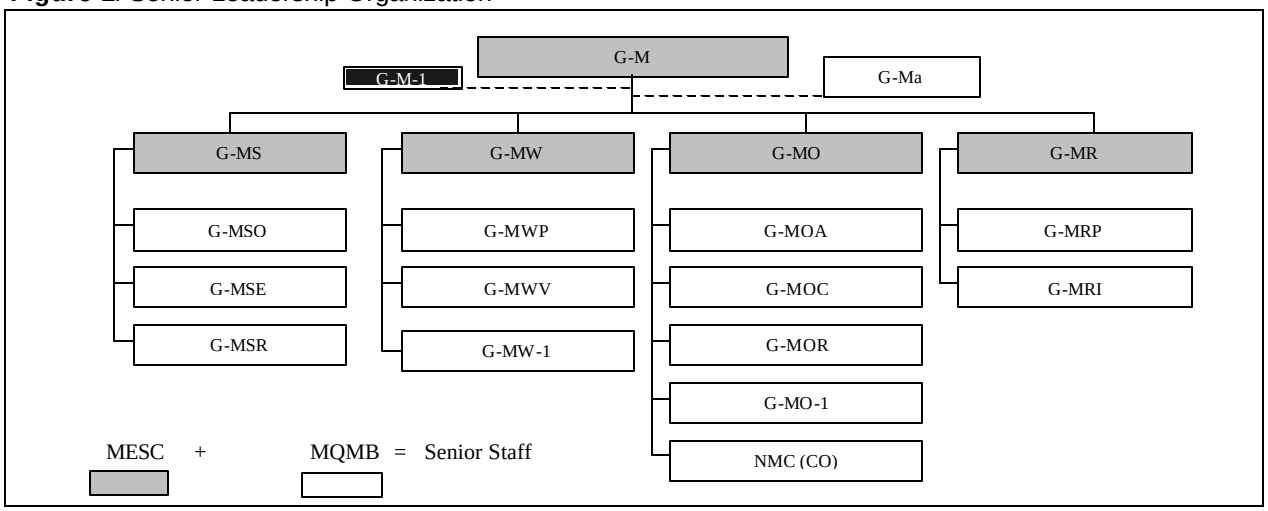
Over the past few years we've established formal partnerships with industry organizations, using quality management principles in joint efforts to enhance marine safety and environmental protection in marine operations. The quality movement creates an opportunity for the Coast Guard and industry management to re-define their roles in fostering marine safety and environmental protection. Quality partnerships with maritime managers and workers leverage resources and offers innovative non-regulatory approaches to problem solving. Formal partnerships have been established with major marine industry associations in the United States including ***The American Waterways Operators***, the ***Passenger Vessel Association***, the ***American Petroleum Institute***, and ***Chamber of Shipping***. One of the key aspects of our formal partnership agreements is the establishment of quality action teams comprised of industry and Coast Guard representatives who are charged with analyzing data on marine accidents and recommending cost-effective solutions to improve safety. We will continue to expand our partnership efforts as opportunities emerge with other industry leaders.

### *e. Headquarters G-M Organizational Description:*

The ***mission of the headquarters*** Marine Safety and Environmental Protection Directorate is *to develop federal regulations and program policy, provide guidance, obtain and allocate resources to support the Coast Guard Strategic Goals*. Additionally, the Directorate coordinates with Coast Guard units, other government agencies, and the maritime industry to effectively and efficiently accomplish this mission.

The Directorate is headed by the Assistant Commandant for Marine Safety and Environmental Protection and the four Directors - Director of Standards (G-MS), Director of Waterways Management (G-MW), Director of Field Activities (G-MO), and Director of Resources (G-MR). These are the five voting members of the M Directorate Executive Steering Committee (MESC). The next level of the senior leadership is the M Quality Management Board (MQMB) and consists of twelve Office Chiefs, the Commanding Officer of the National Marine Center, and G-M's Executive Assistant (G-Ma). Figure 1 outlines the senior leadership and organizational tier.

**Figure 1**: Senior Leadership Organization



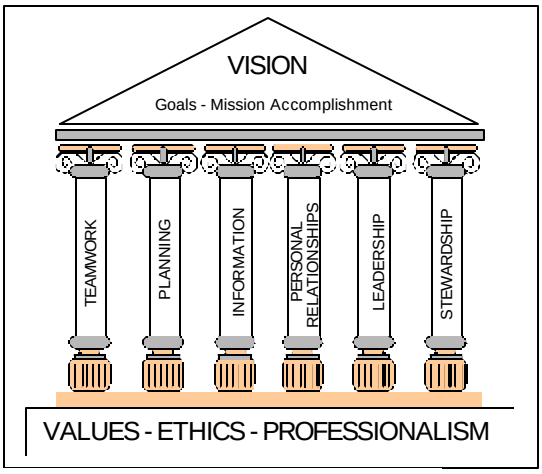




Figure 2: G-M's Parthenon.

The senior leadership addresses values, performance expectations, customer focus, learning and innovation through application of G-M's Parthenon of Principles (Figure 2). The "Parthenon" is the Assistant Commandant's philosophy of Command, Leadership and Management and represents a model for the organization to embrace. At the foundation of the Parthenon are Values, Ethics and Professionalism. The columns, resting on the foundation, representing Teamwork, Personal Relationships, Planning, Information, Stewardship, and Leadership are essential as the means to support the Parthenon's roof that represents Mission Accomplishment, Goals and Vision. The columns represent principles that all members of the M Directorate should employ every day to accomplish the short and long-term missions, goals and vision.

G-M's values, which include the Coast Guard values, are promoted, reinforced and recognized directly in the Parthenon principles. Performance expectations are addressed through Professionalism and Mission Accomplishment principles. Customer focus is addressed through the Personal Relationship principle. Learning and innovation are addressed through the Stewardship principle.

### *f. Program descriptions*

The Marine Safety and Environmental Protection Directorate includes operational programs centered on the broad strategies of **Prevention** and **Mitigation** and supported by c**apability resources**. These programs support four mission goals,

which are closely interconnected as illustrated in figure 3. Among these are seven programs, which represent our ***areas of emphasis***. These programs are discussed in Part II of this plan and include:

- Passenger Vessel Safety
- Aquatic Nuisance Species
- Mariner Qualification and Training
- Marine Transportation System

- Port State Control
- Pollution Prevention and Response
- Homeland Defense / WMD
- Commercial Fishing Vessel Safety

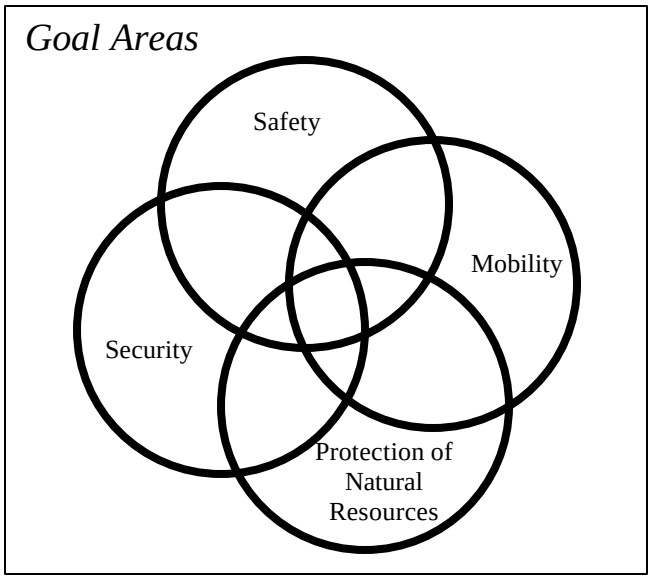



Figure 3: G-M Goals

We have two primary suppliers for our resource capabilities. They are G-W, which we rely on for human resource capabilities and G-S who provides us with information resources. Specific requirements of these and other suppliers are discussed in the appendices to this plan, which include:

- Human Resource Capabilities - Appendix E
- Information Resource Capabilities - Appendix F

### *g. Plan contents*

**Part II** of this plan is the Directorate's Annual Performance Plan. The Performance Plan is divided into three sections; Broad Overview, Specific Performance Goals, and Areas of Emphasis. The broad overview contains program logic models, which illustrate the linkage between our resources and the outcomes we aim to achieve. An analysis of past performance is included in the Specific Performance Goal section to illustrate progress toward each goal and to highlight areas of concern for the future. Finally, the Area of Emphasis section contains two-page program summaries for the seven program areas listed above. These program summaries provide an overview of the program, identify specific key factors, and discuss specific program strategies we will initiate, in conjunction with our core strategies, to achieve our goals. **Part III** of the plan contains a summary of the information received from the Atlantic and Pacific Area Commander's in their Regional Strategic Assessments. Program managers used information from the RSA Issue Papers in revising strategies and resource requirements. The final section of the plan, **Part IV**, contains our Capability Goals, which relate directly to our internal capabilities that must function effectively to enable fulfillment of our performance goals.

# U. S. Coast Guard
# Marine Safety and Environmental Protection

## Business Plan

## FY2001-2005

# Part II - G-M Annual Performance Plan

# Maritime Safety

# MARITIME SAFETY

## *a. Broad Overview*

USCG Strategic Goal: Eliminate deaths, injuries and property damage associated with maritime transportation, fishing, and recreational boating.

G-M Performance Goals:

**MS-1**: By 2005, reduce the crewmember fatality rate by 20% from the five-year average of 48 fatalities per 100,000 workers to no more than 38.

**MS-2**: By 2005, reduce the crewmember injury rate by 20% from the five-year average of 412 injuries per 100,000 workers to no more than 330.

**MS-3**: By 2005, reduce passenger fatalities by 20% from the five-year average of 24 fatalities per year to no more than 19.

**MS-4**: By 2005, reduce passenger injuries by 20% from the five-year average of 171 injuries per year to no more than 137.

**MS-5**: By 2005, reduce the amount of property damage by 20% from the five-year average of 190 million dollars per year to no more than 152 million.

Program Logic Discussion:

The Coast Guard Operational Directorates, G-M and G-O, employ two broad strategies aimed at the safety goal: Incident Prevention and Mitigation. Considerable resources are committed to activities aimed at preventing incidents from occurring. These activities include regulatory and policy development, boardings and inspections of vessels and facilities aimed at ensuring compliance, educating the industry and public on safe practices, and specialized services such as aids to navigation, traffic management, and voluntary vessel examinations. When incidents do occur, the strategy shifts to one of mitigating the effects of the incident by minimizing injury, and saving lives and property. Mitigation activities include development of survival standards and regulations, information and coordination support, and incident response including casualty response and search and rescue. The model on the following page depicts the activities we perform in the Marine Safety and Environmental Protection program in the context of Coast Guard Safety, i.e., both G-O and G-M. Activities that are specifically administered by G-M are shown in bold.

MARITIME SAFETY

| Goal Impact | Outcome | Strategy | Activity | Outputs |
|---|---|---|---|---|
| Maritime Safety | Eliminate Deaths, Injuries and Property Damage Associated with Maritime Transportation, Fishing, and Recreational Boating | Prevent | Recreational Boating Safety | Training<br>Education through Auxiliary Boating Safety Courses<br>Outreach Efforts/Campaigns<br>Public Outreach by CG Auxiliary<br>Courtesy Marine Examinations (Auxiliary)<br>Marine Dealer Visits (Auxiliary)<br>Recreational Boating Regulations<br>Boat Standards<br>State Programs |
| | | | Short Range Aids to Navigation | Information<br>Short Range Positioning Services<br>Navigation Rules |
| | | | Radio-Aids to Navigation | Radio-navigation Positioning Services<br>Electronic Position Fixing Regulations |
| | | | Search and Rescue | Communications |
| | | | Ice Operations | International Ice Patrol |
| | | | Bridge Administration | Bridge Lighting, Fendering, Permits, Alterations<br>Bridge Regulations<br>Civil Penalty |
| | | | Port Safety and Security | Hazmat Regulations |
| | | | Law Enforcement | Boardings |
| | | | **Manage / Control Waterways** | **Vessel Transit** |
| | | | **Support / Manage Resources** | **Policy & Regulation Guidance**<br>**Presentations / Representation** |
| | | | **Document Vessels** | **Vessel Registration Document** |
| | | | **Provide Mariner Licensing / Documentation Oversight** | **Mariner Credentials**<br>**Approved Course** |
| | | | **Conduct Inspections / Monitoring** | **Completed Vessel Inspection**<br>**Completed Facility Inspection**<br>**Completed Container Inspection**<br>**Cargo Transfer Monitoring** |
| | | Mitigate | Search and Rescue | Search and Rescue Coordination<br>Distress Communications |
| | | | Recreational Boating Safety | Auxiliary Response<br>State Programs<br>Carriage Requirements<br>Education<br>Boating Standards<br>Equipment Standards |
| | | | Bridge Administration | Information and Coordination<br>Broadcast and Mariner Notice<br>Public Outreach<br>Partnerships with Bridge Owners |
| | | | Radio-Aids to Navigation | Radio-Navigation Positioning Services |
| | | | Short Range Aids to Navigation | Short Range Navigation Positioning Services |
| | | | **Incident Response** | **Pollution Response**<br>**Casualty Response**<br>**Disaster Response** |
| | | | **Investigations & Controls / Sanctions** | **Criminal & Civil Penalty**<br>**Letter of Warning**<br>**Suspension & Revocation Proceeding**<br>**Detention Order** |
| | | | **Support / Manage Resources** | **Policy & Regulation Guidance**<br>**Pollution Response**<br>**Casualty Response**<br>**Disaster Response** |

Program requirements:

The table below is designed to give you an overview of activities for the strategic Safety goal and to show how these activities are grounded in the law. Most of the activities we perform are authorized or mandated by some form of law, regulation, or Coast Guard policy. Some of our activities are rooted in all three of these forms of guidance, while others are simply authorized by general internal policies. This view is useful when examining the body of base activity in terms of resource availability.

| Program Activity | Source of Requirement or Authorization |
|---|---|
| Conduct Deterrence and Detection Activities | Authorized by Statute |
| Manage/ Control Waterways | Authorized by Statute and Regulation |
| Support/Manage Resources | Required by Coast Guard Policy |
| Document Vessels | Required by Statute and Coast Guard Policy |
| Provide Mariner Licensing/Documentation | Required by Statute and Regulation |
| Conduct Inspections/Monitoring | Authorized by Statute and Regulation |
| Incident Response | Required and Authorized by Statute |
| Investigations & Controls/Sanctions | Required and Authorized by Statute |
| Support/Manage Resources | Required by Coast Guard Policy |

Resource Distribution:

Safety activities comprise approximately 43% of the Marine Safety and Environmental Protection program budget, or $365.7 million. This information is based on labor survey data from the Activity Based Cost Management (ABCM) study of 1998. This includes activity distribution information based on a pilot project at two field units. It does not account for the different distribution of activity costs that exists at Coast Guard Headquarters, or at Headquarters units. The Headquarters and other staff elements activity dictionary is currently in the revision and improvement stage, and will be validated later in the study.

FY2001 funding profile for activities shown below reflects OE and AC&I budget authority. Figures are expressed in millions of dollars.

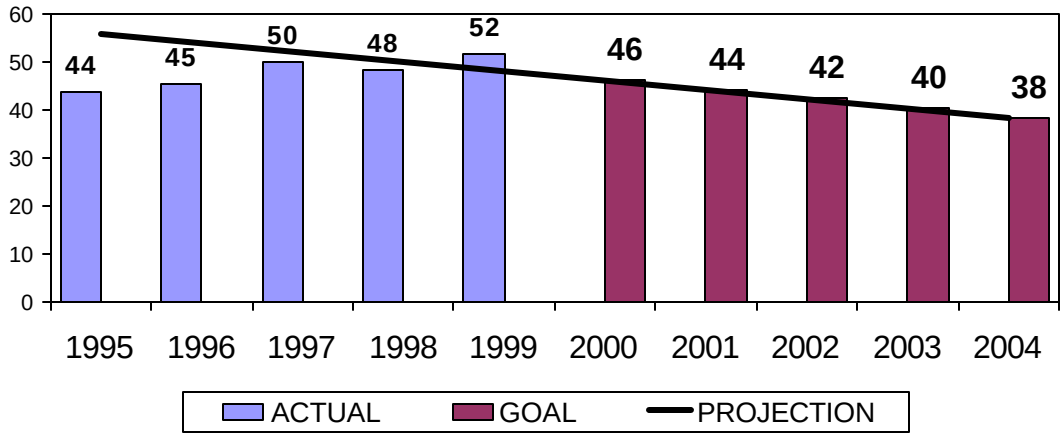
| Activity | Sub-Activity | Task | Funding Profile |
|---|---|---|---|
| **Incident Response** | Receive Incident Notification | Receive Pollution Incident Notification<br>Receive Casualty Incident Notification<br>Receive SAR Incident Notification | $6.0 |
| | Conduct Initial Assessment | Conduct Initial Pollution Assessment<br>Conduct Initial Casualty Assessment<br>Conduct Initial SAR Assessment | $11.7 |
| | Activate Response | Activate Pollution Response<br>Activate Casualty Response<br>Activate SAR Response | $30.6 |
| **Investigations & Controls / Sanctions** | Conduct Investigation | Conduct Casualty and Personnel Actions Investigation<br>Conduct Marine Violation Investigation<br>Conduct Pollution Investigation | $25.5 |
| | Document Investigation | Document Casualty Investigation<br>Document Marine Violation Investigation<br>Document Pollution Investigation | $19.5 |
| | Generate Sanction/Control Action | | $7.6 |
| | Conduct Drug and Alcohol Program Inspection (DAPI) | | $2.0 |
| **Conduct Inspections / Monitoring** | Perform Vessel Inspection | Conduct Vessel Scheduling<br>Conduct File/Plan Review<br>Conduct Vessel Inspection<br>Document Vessel Inspection<br>Administer Overseas Inspections Program | $95.6 |
| | Certify Life Raft Servicing Facility | | $2.6 |
| | Conduct Container Inspection | | $0.5 |
| | Conduct Barge Fleeting Inspection | | $1.1 |
| | Conduct Explosive Handling Supervision | | $2.8 |
| **Manage / Control Waterways** | Evaluate Traffic | | $1.7 |
| | Advise Transiting Mariners | | $8.7 |
| | Coordinate River Traffic/VTS | | $11.3 |
| | Evaluate Marine Event Application | | $0 |
| | Conduct Routine ATON Inspection and Maintenance | | $0 |
| | Conduct Preventative ATON Actions | | $0 |
| | Conduct ATON Discrepancy Response | | $0 |
| | Conduct WAMS | | $0 |
| | Perform Icebreaking Activities | | $0 |
| | Provide Communication Service | | $3.0 |
| **Provide Mariner Licensing / Documentation Oversight** | Schedule Appointments/Receive Applications | | $5.2 |
| | Evaluate Mariner's Application | | $13.5 |
| | Administer Mariner Exams | | $1.6 |
| | Issue License/Document to Mariners | | $8.8 |
| | Collect/Reconcile User Fee | | $3.6 |
| | Develop & Update Exam | | $1.6 |
| | Evaluate/Re-certify Course | | $2.1 |
| **Support / Manage Resources[2]** | Manage Resources | Manage Human Resources<br>Manage Financial Resources<br>Procure Material<br>Manage Information Systems Resources<br>Manage Property | $39.8 |
| | Perform Command Duties | Prepare / Deliver Public Outreach<br>Respond to Inquiries / FOIA Requests<br>Develop Policy & Regulation Guidance<br>Develop / Exercise Plans<br>• Develop / Exercise Contingency Plans<br>• Develop / Exercise Strategic / Military Readiness Plans | $58.3 |
| **Document Vessels** | Document Vessels | | $1.0 |

[2] This activity will presumably be expanded after review and validation of the Headquarters and staff elements activity dictionary.

## *b. Specific Performance Goals*

Past Performance and Analysis

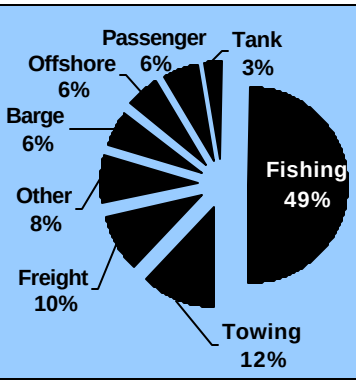
**MS-1: By 2005, reduce the crewmember fatality rate by 20% from the five-year average of 48 fatalities per 100,000 workers to no more than 38.**




**Includes**: Reportable marine casualties resulting in the death (or disappearance) of a crewmember or employee aboard U.S. vessels. Crewmember includes the following role types: deck crew, deck officer, engine crew, employee, eng officer, master, steward department, and tankerman.
**Excludes**: Death/disappearance from foreign vessels, any platforms and any facilities, and whenever death/disappearance is determined to be from natural causes or the result of an intentional act (altercation, attempted suicide, homicide, natural causes, and suicide).

| Fiscal Year | Crewmember Fatalities | Total Workers | Fatalities per 100K Workers | Goal |
|---|---|---|---|---|
| 1995 | 113 | 259000 | 44 | |
| 1996 | 115 | 254200 | 45 | |
| 1997 | 120 | 240025 | 50 | |
| 1998 | 111 | 229995 | 48 | |
| 1999 | 119 | 230000 | 52 | |
| 2000 | | | | 46 |
| 2001 | | | | 44 |
| 2002 | | | | 42 |
| 2003 | | | | 40 |
| 2004 | | | | 38 |

**Crewmember Fatalities by Vessel Class (1995-1999)**



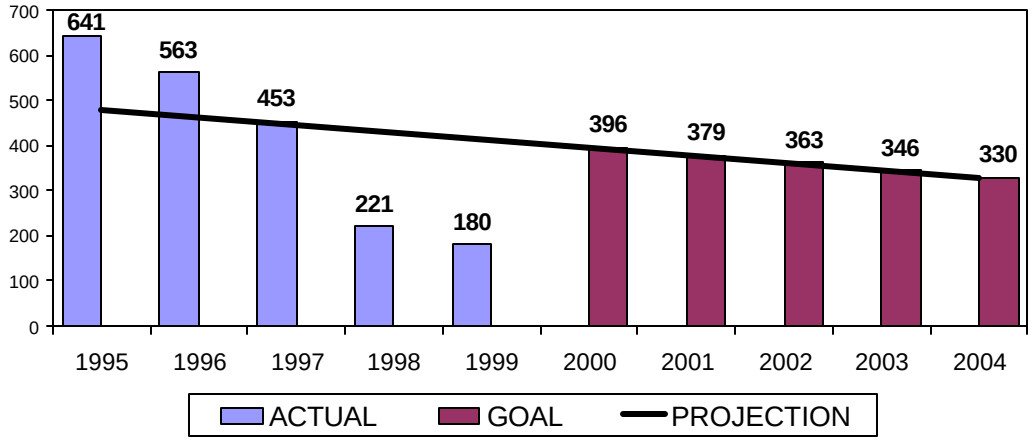

Number of maritime workers based on data provided by: Bureau of Labor Statistics (BLS), National Marine Fisheries Service (NMFS), Offshore Marine Service Association (OMSA), and the Inernational Association of Drilling Contractors (IADC).

**1995-1999 Crewmember Fatalities**

| | Deaths | Missing | Total |
|---|---|---|---|
| Fishing | 207 | 84 | 291 |
| Towing | 58 | 12 | 70 |
| Freight | 45 | 10 | 55 |
| Other | 37 | 8 | 45 |
| Barge | 34 | 0 | 34 |
| Offshore (OSV) | 33 | 1 | 34 |
| Passenger | 24 | 8 | 32 |
| Tank | 13 | 4 | 17 |

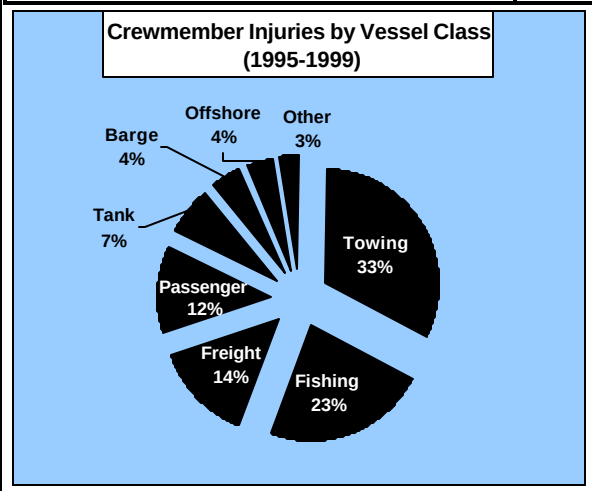
## Past Performance and Analysis

**MS-2: By 2005, reduce the crewmember injury rate by 20% from the five-year average of 412 injuries per 100,000 workers to no more than 330.**




**Includes**: Reportable marine casualties resulting in injury of a crewmember or employee aboard U.S. vessels, except as noted below.
**Excludes**: Fatal injuries (i.e. death). Injuries on foreign vessels, any platforms, and any facilities; any injury determined to be from natural causes (e.g. heart attack) or the result of an intentional act (e.g. attempted suicide, altercation).

| Fiscal Year | Crewmember Injuries | Total Workers | Inj/100K Workers | Goal |
|---|---|---|---|---|
| 1995 | 1661 | 259000 | 641 | |
| 1996 | 1430 | 254200 | 563 | |
| 1997 | 1087 | 240025 | 453 | |
| 1998 | 508 | 229995 | 221 | |
| 1999 | 415 | 230000 | 180 | |
| 2000 | | | | 396 |
| 2001 | | | | 379 |
| 2002 | | | | 363 |
| 2003 | | | | 346 |
| 2004 | | | | 330 |



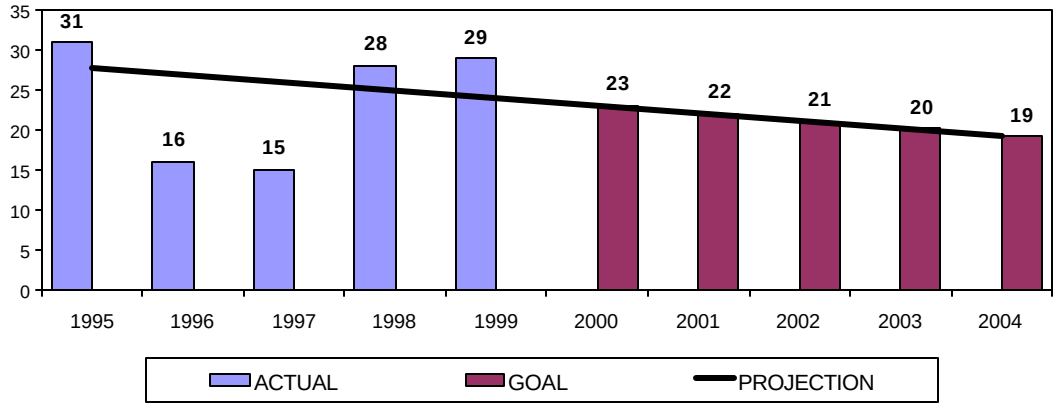

Number of maritime workers based on data provided by: Bureau of Labor Statistics (BLS), National Marine Fisheries Service (NMFS), Offshore Marine Service Association (OMSA), and the Inernational Association of Drilling Contractors (IADC).

**1995-1999 Crewmember Injuries**

| Vessel Class | Total Injuries |
|---|---|
| Towing | 1660 |
| Fishing | 1192 |
| Freight | 718 |
| Passenger | 620 |
| Tank | 362 |
| Barge | 214 |
| Offshore | 191 |
| Other | 144 |

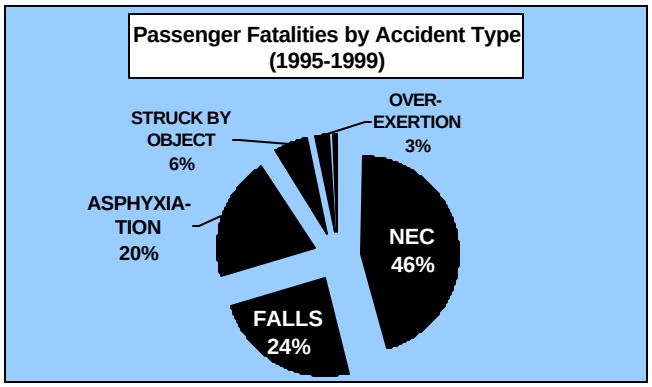
## Past Performance and Analysis

**MS-3: By 2005, reduce passenger fatalities by 20% from the five-year average of 24 fatalities to no more than 19.**




**Includes**: Reportable marine casualties resulting in the death or disappearance of a passenger aboard any U.S. vessel (regardless of type or location) or aboard a foreign-flagged vessel in U.S. waters, except as noted below.
**Excludes**: Death/disappearance of all "non-passengers". All cases where the cause of death/disappearance was classified as from diving, natural causes, (e.g. heart attack) or the result of an intentional act (e.g. suicide, altercation). Recreational vessels are not allowed to carry "passengers" and are therefore excluded.

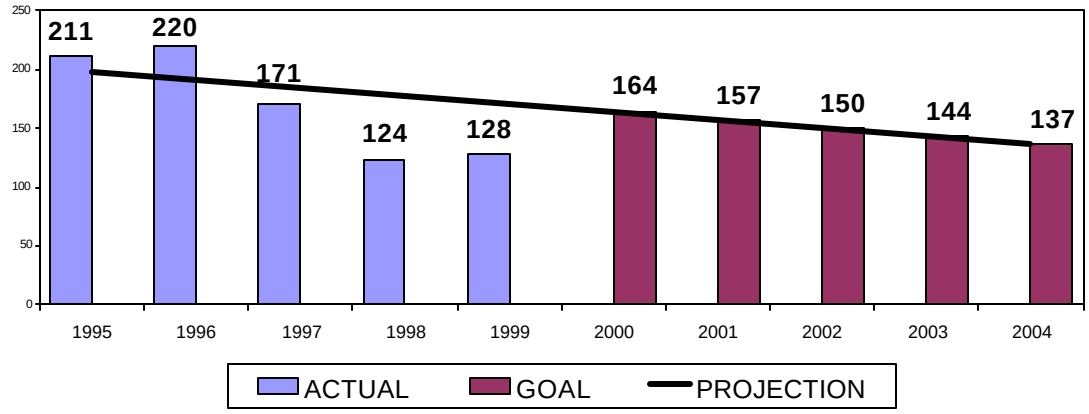
| Fiscal Year | Passenger Fatalities | Goal |
|---|---|---|
| 1995 | 31 | |
| 1996 | 16 | |
| 1997 | 15 | |
| 1998 | 28 | |
| 1999 | 29 | |
| 2000 | | 23 |
| 2001 | | 22 |
| 2002 | | 21 |
| 2003 | | 20 |
| 2004 | | 19 |




| Total Passenger Fatalities by Accident Type (1995-1999) | |
|---|---|
| NEC | 55 |
| FALLS | 29 |
| ASPHYXIATION (e.g., drowning, suffocation) | 24 |
| STRUCK BY OBJECT | 7 |
| OVEREXERTION | 3 |
| EXPOSURE | 1 |

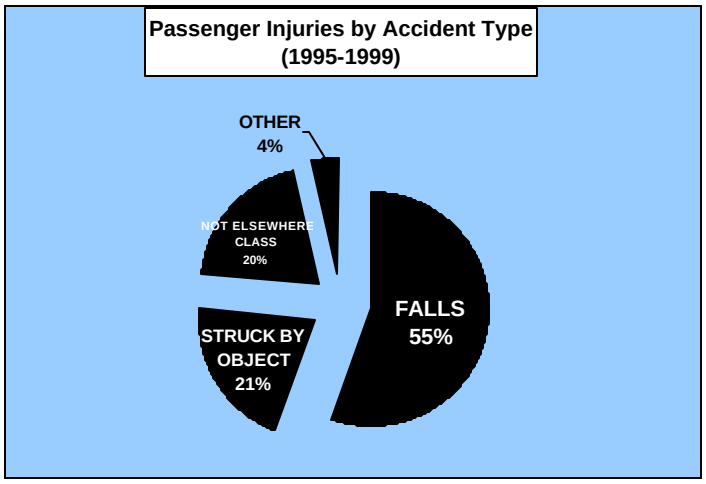
## Past Performance and Analysis

**MS-4: By 2005, reduce passenger injuries by 20% from the five-year average of 171 injuries to no more than 137.**




**Includes:** Reportable marine casualties resulting in the injury of a passenger, aboard a U.S. vessel (regardless of type or location) or aboard a foreign-flagged vessel in U.S. waters, except as noted below.
**Excludes:** Injury of "non-passengers". All cases where the injury was classified as from diving, natural causes (e.g. heart attack) or the result of an intentional act (e.g. attempted suicide, altercation). Recreational vessels are not allowed to carry "passengers" and are therefore excluded.

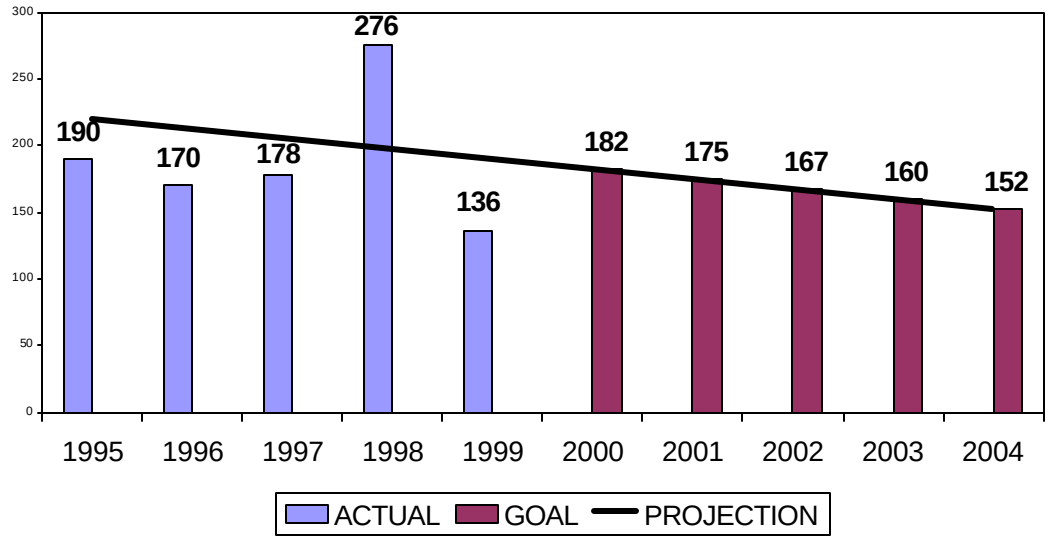
| Fiscal Year | Passenger Injuries | Goal |
|---|---|---|
| 1995 | 211 | |
| 1996 | 220 | |
| 1997 | 171 | |
| 1998 | 124 | |
| 1999 | 128 | |
| 2000 | | 164 |
| 2001 | | 157 |
| 2002 | | 150 |
| 2003 | | 144 |
| 2004 | | 137 |




| Passenger Injuries by Accident Type (1995-1999) | |
|---|---|
| FALLS | 478 |
| STRUCK BY OBJECT | 176 |
| NOT ELSEWHERE CLASS | 168 |
| OTHER | 32 |

## Past Performance and Analysis

**MS-5: By 2005, reduce the amount of property damage by 20% from the five-year average of 190 million dollars to no more than 152 million.**

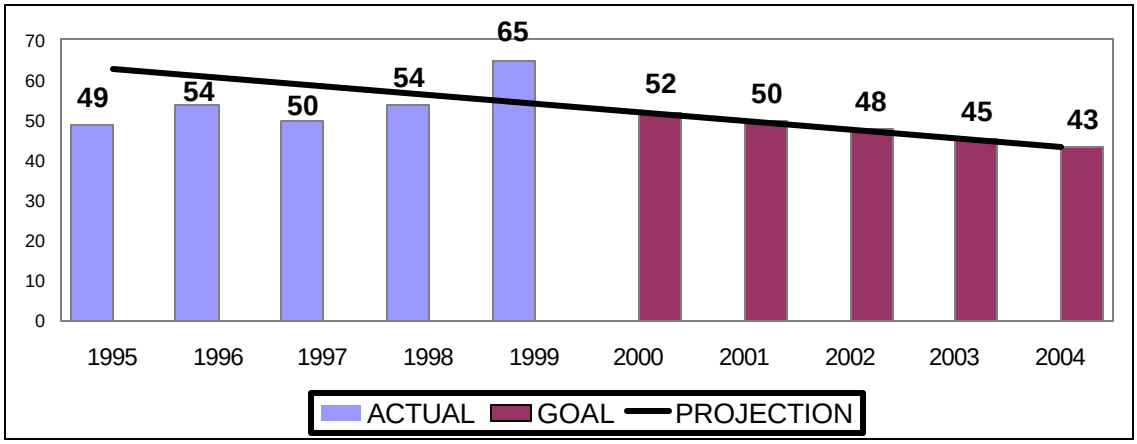



| Year | Damage (In millions of $) | Goal |
|---|---|---|
| 1995 | 190 | |
| 1996 | 170 | |
| 1997 | 178 | |
| 1998 | 276 | |
| 1999 | 136 | |
| 2000 | | 182 |
| 2001 | | 175 |
| 2002 | | 167 |
| 2003 | | 160 |
| 2004 | | 152 |

**Includes**: Dollar amount of property damage resulting from marine casualty cases.
**Excludes**: Property damage from pollution cases.

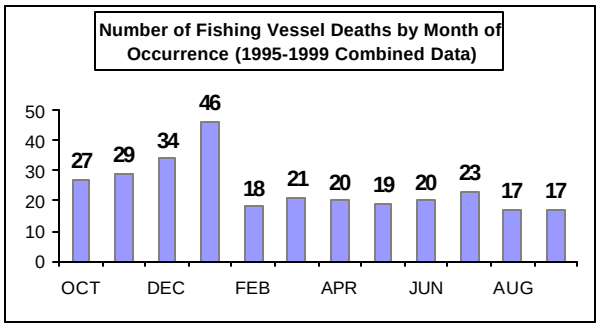
## Past Performance and Analysis

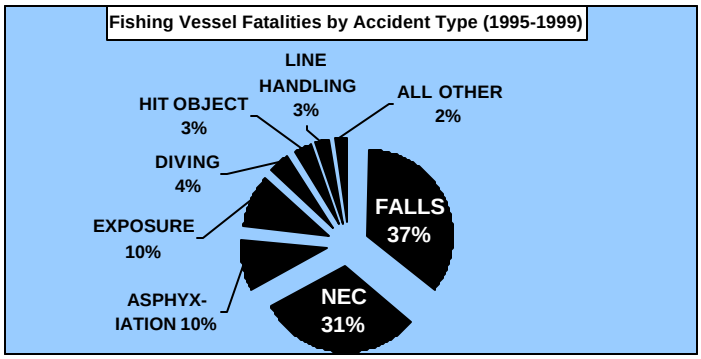
### Fishing Vessel Fatalities




**Includes**: All deaths and disappearances of crewmembers on fishing vessels.
**Excludes**: Any death or disappearance on other than fishing vessels, and non-crewmembers on fishing vessels.

| Fiscal Year | Fishing Vessel Worker Fatalities | Total Workers | Fatalities per 100K Workers | Goal |
|---|---|---|---|---|
| 1995 | 61 | 125000 | 49 | |
| 1996 | 62 | 115500 | 54 | |
| 1997 | 52 | 105000 | 50 | |
| 1998 | 53 | 98500 | 54 | |
| 1999 | 63 | 97000 | 65 | |
| 2000 | | | | 52 |
| 2001 | | | | 50 |
| 2002 | | | | 48 |
| 2003 | | | | 45 |
| 2004 | | | | 43 |




| Fishing Vessel Worker Fatalities by Accident Type (1995-1999) | |
|---|---|
| FALLS | 105 |
| NEC | 91 |
| Asphyxiation (e.g. drowning, suffocation) | 28 |
| EXPOSURE | 29 |
| DIVING | 12 |
| HIT OBJECT | 10 |
| LINE HANDLING | 9 |
| ALL OTHER | 7 |

### *c. Areas of Emphasis*

## PASSENGER VESSEL SAFETY

**Strategic Goal:** No passenger deaths.

**Background and Analysis:**
The US domestic passenger vessel fleet includes approximately 6000 vessels of 100 GT and under and about 200 vessels over 100 GT. Annual passenger carriage is about 200 million. Foreign flag passenger vessels operating from US ports number approximately 130 and carry 7.5 million passengers annually.

The safety record of passenger vessels operating from US ports (domestic and foreign) is excellent. There have been no passenger deaths on foreign flag cruise ships due to a vessel casualty in the last 16 years. Deaths due to a casualty on domestic vessels are in a downward trend. However, there was one recent exception where 13 lives were lost on the MISS MAJESTIC. Passenger injury trend is also downward on both domestic and foreign vessels carrying passengers from US ports.

Core prevention programs, periodically adjusted and focused through casualty analysis and recognition of risk trends, have been effective in limiting passenger deaths to a small number, generally the result of the loss of the vessel on which they were embarked.

**Industry Trends:**
The foreign cruise ship industry is growing in both numbers and capacity of vessels; and, there is growth in the domestic passenger vessel industry, most notably in high speed vessels. Unique craft such as wing in ground are being developed. Future traffic growth of all types will increase congestion and maritime casualty risk on near coastal and inland waterways.

**Strategies for Improvement:**
Generally, our approach to passenger vessel safety improvement and risk reduction will focus on maximizing core prevention programs while seeking new and innovative means of preventing and responding to a major passenger vessel casualty.

1. Optimize core prevention programs for existing foreign and domestic vessels with adjustments to areas of focus pursuant to available lagging and leading data indicators and on-going marine casualty analysis. Concurrently assess the implications of future vessel and industry growth on prevention and response capabilities.
2. Develop, exercise and enhance response/evacuation plans to deal with the occurrence of a major passenger vessel marine casualty now and in the future.
3. Establish the International Maritime Information Safety System (IMISS) to collect voluntary information about “near-miss maritime accidents.

4. Create quality incentive programs for near term improvement in prevention and response while the need for new standards is being studied.

### Core Prevention Activities, Foreign Flag Vessels:

- Plan review and initial control verification examinations
- Annual control verification examinations and quarterly re-exams
- ICCL partnership projects
- IMO leadership and participation
- Casualty investigations

### Improvement Activities, Foreign Flag Vessels:

- IMISS
- Review recent passenger vessel casualties and other data for trends and risk indicators. Submit analysis and recommendations to IMO. (Completed)
- Take a leadership position at IMO in reviewing current safety standards for adequacy, given trends toward larger, higher capacity passenger vessels, and pursue development of a new and/or improved of standards and practices as indicated.
- Working through ICCL partnership in conjunction with G-O, develop a schedule of major response/evacuation exercises to enhance readiness for casualty response and identify response resource needs. Coordinate schedule with local exercises.
- Create a series of quality incentives for voluntary prevention and response improvement in high-risk areas.
- Develop tool for use by OCMIs to identify risk profiles for vessels under the Control Verification Examination Program.

### Core Prevention Activities, Domestic Vessels:

- Inspection for certification, re-inspection, drydock exam processes.
- Crew licensing and certification processes
- Casualty investigations
- PVA partnership projects

### Improvement Activities, Domestic Vessels:

- IMISS
- Development of special requirements and inspection guidance for high speed vessels
- Local Group/COTP assessment of passenger vessel operations risk and response capabilities; conduct of exercises. Continually assess risks and need for changes in requirements.
- Subchapter W initiative and associated workshops for alternatives assessment. (Completed)
- Develop Subchapter W training module at TRACEN Yorktown
- Development of PVA/USCG data set that defines level of safety, identifies areas of risk for improvement of prevention activities.
- Implementation of Subchapter T/K increased lifesaving equipment requirements.
- Create a series of quality incentives for voluntary prevention and response improvement in high-risk areas working through MARAD, insurance and port industry.
- Development of a risk-based screening tool to be used by field units to identify passenger vessels that pose a high risk due to age, hull material, casualty history and operational route.

## PORT STATE CONTROL (PSC)

**Strategic Goal:** Eliminate substandard foreign-flagged ships from U.S. waters.

**Background and Analysis**:
Since the 1970's, the number of U.S-flagged vessels engaged in international trade has steadily decreased. In 1970, there were approximately 1600 merchant vessels over 1000 gross tons in the U.S. international fleet; approximately 400 remain today. With few U.S. flagged vessels engaged in international trade remaining, foreign-flagged vessels now carry more than 90% of the international commercial freight arriving or departing the U.S. Currently, over 8000 foreign-flagged ships from more than 100 countries arrive in the U.S. every year, which includes 95% of all passenger ships and 75% of all cargo ships (including tankers) entering the U.S.

Considering the reduced size of the U.S. fleet, the greatest potential safety and/or environmental threat to U.S. ports and waterways now comes from foreign-flagged vessels. Over the last five years, over 71% of the casualties of freight and tank ships involved foreign-flagged vessels and nearly half of the world's merchant fleet visited a U.S. port at least one each year.

In 1994 in response to Congress, the Coast Guard enhanced a Port State Control (PSC) program to eliminate substandard vessels from the nation's waters. This PSC program is a risk-based targeting system and was developed recognizing that owners/operators, classification societies, and Flag States directly influence a vessel's compliance with international standards. In general, oil and chemical tankers, gas carriers, passenger ships, bulk carriers over ten years old, and any vessel carrying low value commodities in bulk are given a higher priority for examination under our PSC program. Each vessel entering a U.S. port has certain points assigned to each risk factor in the Boarding Priority Matrix. These points are then totaled to determine its boarding priority, which enables the Coast Guard to determine the probable risk posed by a particular foreign-flagged ship.

Our PSC program is a world class model and serving as an effective deterrent. The yearly number of detentions has dropped dramatically in the last several years.

**Industry Trends:**
Foreign trade predicted to at least double over the next 20 years, most of which will be in ships of other nations. Improved vessel compliance and Flag State responsibility are priorities at IMO that have been gaining momentum that should yield results in the near future.

**Strategies for Improvement:**
Our approach to foreign vessel safety improvement and risk reduction will focus on eliminating the operation of substandard vessels in U.S. waters.

1. Maintain leadership as a PSC agency and world class program. Adjust areas of focus pursuant to available data and PSC program evaluation analysis.
2. Continue aggressive outreach campaign and participate in information transparency (sharing of and availability to all interested parties).
3. Refine targeting scheme to address current risk.
4. Implement an incentive program to reward quality shipping companies.
5. Promote improvements of Flag State performance through leadership at IMO, through the Flag State Implementation (FSI) subcommittee and the use of quality incentives to generate Flag State self assessments.

**Core Prevention Activities:**
- Targeting of vessels and prioritization of boardings.
- Conducting annual and re-examinations.
- Partnerships with INTERTANKO and BIMCO (INTERCARGO pending).
- Regular meetings with classification societies.
- IMO participation- Flag State Implementation (FSI), Flag State Self-Assessment (to assist flag States to better implement and enforce the international standards).
- ISM and STCW 95 enforcement.
- Outreach/transparency of information EQUASIS/MSN.

**Improvement Activities:**
- Identify and reward well run, quality ships with reduction in number of Coast Guard inspections and other incentives, to be implemented in January of 2001.
- Add charterers to the Boarding Priority Matrix; consider adding additional factors such as underwriters and OBO vessels.
- Replace MSIS/MISLE w/MSN to improve data analysis on foreign vsls. Participate in EQUASIS; align MSN with EQUASIS.
- Review training (SMI course) to ensure that PSCOs are receiving the training they need.
- Utilize the Internet to disseminate policy (MSM) and to market PSC program to the world.
- Review results of PSC Program Evaluation and implement recommendations.
- Export PSC successes to other countries.
- Prep for Phase 2 ISM and STCW
- Developed a centralized, web-based advanced notice of arrival process to capitalize on IT capabilities.

## COMMERCIAL FISHING VESSEL SAFETY (CFVS)

**Strategic Goal:** No crewmember deaths.

### Background and Analysis:

The Commercial Fishing Vessel Safety Program (CFVS) is the Coast Guard's effort to improve safety in the fishing industry by helping fishermen comply with the regulations issued pursuant to the Commercial Fishing Industry Vessel Safety Act of 1988. The CFVS Program seeks to improve safety through education, public awareness, voluntary dockside examination of vessels, and regulatory enforcement during at-sea-boardings.

The commercial fishing fleet is estimated to be between 100 – 120,000 vessels with approximately 1,500 vessels over 79 ft. The industry is purported to be one of the most hazardous in the Nation having suffered on average 78 crewmember deaths per year between 1992 and 1999. Although the most serious deficiency in casualty statistics is the lack of firm population data to serve as the denominator for fishermen death rates, available data estimates the fatality rate to be between 160 – 180 fatalities / 100,000 workers - well above 32 fatalities / 100, 000 workers goal set for maritime industry as a whole.

There are 61 designated/funded CFVS M billets. Additional examiner workforce includes 60 Reservists, 94 Auxiliarists, 6 tribal examiners who enforce CFVS regulations on Native American vessels, 9 third-party examiners, and 130 qualified active duty personnel assigned to non-CFVS billets including Groups and Stations that conduct dockside examinations as collateral duties. The workforce completed 7225 exams in 1999, approximately 6% of fleet.

G-M convened the Commercial Fishing Vessel Task Force to review the state of CFVS due to rash of losses in January 1999. The Task Force generated 59 recommendations from which a CFVS Action Plan to improve safety was developed.

The Task Force found that after the 1988 Act, fishing vessel deaths declined about 25% but have begun a slight upward trend. Typically, fishermen die because they enter the water due to vessel loss or falls overboard.

### Industry Trends:

The casualty data indicate that the death rate among fishermen has reached a plateau or begun a slight upward climb while the population of fishing vessels is in steady state. However, NMFS believes that the fishing industry is still over-capitalized and putting excessive pressure on fish stocks. Due to dwindling fish stocks, fishermen are experiencing increased economic pressure and competition resulting in significantly reduced profit opportunities. These economic pressures combined with fisheries management decisions encourage risk taking, deferred maintenance of vessels, and deferred purchase/upkeep of required safety gear.

**Strategies for Improvement:**
Enforce current requirements while pursuing FVS action plan short and long term activities.

1. Submit LCPs for mandatory examination of F/Vs
2. Initiate regulatory project to require mandatory training based certificate program for one crewmember on vessels already required to conduct drills, safety instruction, and safety orientation.
3. Complete supporting regulatory projects.

**Core Prevention Programs:**

- Voluntary Dockside Program
- At Sea Boardings
- Commercial Fishing Industry Vessel Advisory Committee

**Improvement Activities:**

Implement short term action plan activities.

- Support LANTAREA & PACAREA FIELD OPS (Safe Catch/Safe Return) (Completed)
- Improve CFVS Outreach (Completed)
- Form a CFVS Division in G-MOC (Completed)
- 
- Conduct Regional Listening Sessions to discuss the CFVS Action Plan (Completed)
- 
- Modify action plan in response to industry input. (Completed)

Implement long-term action plan activities

- Bolster Drill Enforcement
- Complete Regulatory Project on Stability & Watertight Integrity for vessels < 79ft
- Improve Casualty Investigation and Analysis
- Improve Communication with Industry
- Coordinate Fishery Management with Safety
- Require Mandatory Dockside Examinations for high-risk vessels.
- Seek Authority to require Mandatory Training and Certification of certain Crewmembers under existing authority.
- Seek authority to substitute “Territorial Sea Baseline” for “Boundary Line”
- Seek voluntary incentives through the insurance industry.
- Expand existing training/instruction to include basic stability.

## MARINER QUALIFICATIONS AND TRAINING

**Strategic Goal**: Improve mariner qualification and training to provide competent, qualified mariners, supported by a responsive Mariner Licensing and Documentation (MLD) program and mariner database, fully compliant with domestic and international standards.

### Background and Analysis:

It is widely accepted that over 80% of all marine accidents are attributable to human error or failure. Thus, the MLD Program, which focuses solely on the qualification of mariners, is key to influencing the human element and arguably the most important marine safety program for preventing marine casualties and pollution. The Coast Guard maintains over 200,000 merchant mariner records and interacts with thousands of mariners, marine employers, maritime unions, maritime educators, maritime academies, and other marine industry groups annually. Seventeen Regional Examination Centers (RECs) were established in the early 1980's as an efficiency and cost reduction measure which consolidated MLD functions performed at the 52 MSO's/MIO's. Since the creation of the RECs, new maritime legislation has dramatically impacted the marine industry and the MLD Program has struggled to keep pace. Despite an increased emphasis and trend towards privatization of government activities, the MLD program has not been permitted to shift many functions to the private sector. The program has realized a gradual increase in number and complexity of functions performed by RECs as well as slow but steady increase in workload due to OPA 90, user fees, STCW and new towing vessel regulations. The MLD program has accomplished these new responsibilities to date without any appreciable increase in resources. At the same time, overall experience (background/qualifications) level of REC personnel has declined. RECs are plagued by constant backlogs of unprocessed applications and inability to meet course oversight responsibility resulting in less reliable qualification and training, as well as mariners' and marine employers' complaints about the quality of service provided.

### Industry Trends:

- The total volume of domestic and international marine trade is expected to double over the next 20 years.
- An increasingly sophisticated and technically advanced maritime industry requires enhanced knowledge, understanding, skill and proficiency in navigation, engineering, cargo handling and pollution prevention.
- There will be an increasing deficit in the number of available qualified mariners needed to support U.S. commercial vessel operations and military sealift requirements as recruitment and retention of seagoing mariners within the maritime industry continues to decline.
- The future of the maritime industry depends on the ability to attract, train, qualify and retain skilled shipboard personnel.

**Strategies for Improvement**:

1. Consistently enforce current laws, regulations and policy.
2. Partner with mariners and the maritime community.
3. Enhance the Merchant Mariner Licensing and Documentation (MMLD) data system to ensure system integrity and provide reliable mariner information and REC workload measurement capability.
4. Harmonize domestic and international merchant mariner licensing, documentation and certification schemes.
5. Apply casualty analysis and STCW assessment methodology to revise USCG exams accounting for subjects adequately covered by on-board assessments.
6. Ensure oversight programs are in place for mariner training courses, mariner evaluation, examination administration and issuance of mariner credentials.
7. Empower third party organizations to perform select MLD functions on behalf of the Coast Guard (e.g., exam administration and qualification evaluations).
8. Ensure outdated and/or counterproductive licensing and manning statutes, regulations and policy are eliminated or changed.

**Core Activities:**

- Issue licenses, documents and certificates of registry to qualified applicants.
- Review maritime training courses, issue approval certificates and conduct course oversight.
- Evaluate medical waiver requests and appeals of OCMI/District Commander decisions.
- Process WWII mariner veteran status requests.
- Network with and provide superior MLD service to the maritime community, while ensuring mariner qualifications meet U.S. and international standards.
- Measure and monitor REC/NMC staff workload and performance; identify improvement areas and streamline existing processes, as appropriate
- Enforce mandatory requirements.
- Implement an innovative MLD education and outreach program.

**Improvement Activities**:

- Implement STCW by February 2002 (target July 2001 for USCG completion).
- Implement new regulations and policy (NVIC) for Towing Vessels.
- Establish three regional licensing renewal centers(G-CCS approved concept).
- Review domestic licensing regulations to evaluate current licensing structure and incorporate “benefits” of STCW.
- Partner with the maritime industry to co-sponsor a National Conference on recruiting, training (competence/qualifications) and retaining mariners.
- Conduct action workout (AWO) at REC Baltimore in February 2001; export lessons learned/best practices to other RECs.
- Develop legislation (CY01/FY02 LCP), regulations, and implementation guidelines as necessary for third party authority to perform appropriate REC functions like evaluating mariner applications and administering exams.
- Determine and provide proper staffing levels at RECs to meet future mission workload demands.

# Maritime Security

# MARITIME SECURITY

## *a. Broad Overview*

USCG Strategic Goal:

**Maritime Security** – Protect our maritime borders from all intrusions by halting the flow of illegal drugs, aliens, and contraband into this country through maritime routes; preventing illegal fishing; and suppressing violations of federal law in the maritime region.
**National Defense** – Defend the nation as one of the five U.S. Armed Forces. Enhance regional stability in support of the National Security Strategy, utilizing our unique and relevant maritime capabilities.

G-M Performance Goals:

**SEC-1**: By 2005, reduce the vulnerability of the Marine Transportation System (MTS) to intentional harm from military, criminal, or terrorist acts to no higher than "medium."

**SEC-2**: By 2005, monitor the location and operation, in U.S. waters, of 100% of vessels identified by the NSC and DoD as security threats.

**SEC-3**: By 2005, reduce the vulnerability to terrorism of U.S. citizens on passenger vessels and in terminals to no higher than "low."

**SEC-4**: By 2005, achieve national readiness level of C2 for Commander-in-Chief (CINC) Military Environmental Response Operations (MERO) support.

**SEC-5**: By 2005, achieve a readiness level of C2 in interdiction and consequence management responsibilities with respect to the use or threat of the use of Weapons of Mass Destruction (WMD).

Program Logic Discussion:

The Coast Guard Operational Directorates employ strategies aimed at two intermediate security outcomes: deterrence and interdiction. In most cases, the Coast Guard acts as an enforcement arm, while the actual laws are instruments of other federal agencies (e.g., Customs, Immigration and Naturalization Service, National Oceanographic and Atmospheric Administration, National Marine Fisheries Service, Environmental Protection Agency, etc.). Most activities related to this goal are conducted through deterrence and interdiction strategies. Other strategies, such as education, reducing demand, and encouraging obedience of laws, are conducted by the responsible regulating agencies. The deterrence strategy is enhanced by Coast Guard actions, including patrols, surveillance and reporting of violations and enforcement. The interdiction strategy is executed through Coast Guard enforcement and intelligence efforts. The following model shows activities performed in the Marine Safety and Environmental Protection Program, shown in the context of overall Coast Guard field operations. G-M activities are shown in bold.

| Goal Impact | Outcome | Strategy | Activity | Outputs |
|---|---|---|---|---|
| Security | Protect our maritime Borders from all intrusions by halting the flow of illegal drugs, aliens, and contraband into this country through maritime routes; preventing illegal fishing; and suppressing violations of federal Law in the maritime region<br>Defend the nation As one of the five U.S. Armed Forces.<br>Enhance regional Stability in support of the National Security Strategy, utilizing our unique And relevant Maritime capabilities. | Deter and Reduce Vulnerability | Law Enforcement | Patrols<br>Surveillance |
| | | | Public Awareness | Public Reporting of Drugs Captured<br>Public Reporting of Fisheries Violations<br>Public Reporting of Migrants Repatriated |
| | | | **Conduct Deterrence and Detection Activities** | **Harbor Patrol Service**<br>**Intelligence Information** |
| | | | Law Enforcement | Patrols & Boardings<br>Drug Interdictions<br>Migrant Interdictions<br>Fisheries Violations |
| | | | **Conduct Inspections / Monitoring** | **Completed Facility Inspection**<br>**Completed Container Inspection**<br>**Explosive Handling Supervision** |
| | | | Intelligence | Intel Gathering<br>Intel Correlation |
| | | Readiness | Drug Operations | Memoranda of Understanding with DOD<br>Understand Requirements<br>Obtain Capabilities<br>Deploy Capabilities<br>PSU Deployment<br>Supplement Naval Forces<br>Low Threat Escorts (Auxiliary)<br>PSU Deployment<br>Supplement Naval Forces<br>Exercise Participation (Auxiliary)<br>Secure Networks |
| | | | Bridge Administration | Bridge Surveys/Contingency Planning<br>Information and Coordination<br>Broadcast and Mariner Notice |
| | | | Contingency Preparedness Program | Contingency Planning<br>Preparedness<br>Exercises |
| | | | Short Range Aids to Navigation | Information/Local Notice to Mariners<br>Short-range ATON Positioning Services<br>Short-Range Aids to Navigation<br>Notice to Mariners |
| | | | **Incident Response** | **Disaster Response** |
| | | | **Investigations & Controls / Sanctions** | **Criminal & Civil Penalty**<br>**Letter of Warning**<br>**Suspension & Revocation Proceeding**<br>**Detention Order** |
| | | | Search and Rescue | Communications<br>Search & Rescue<br>Platform Augmentation<br>VHF-FM Communications |
| | | | **Manage / Control Waterways** | **Vessel Transit** |
| | | | **Support / Manage Resources** | **Policy & Regulation Guidance**<br>**Presentations / Representation**<br>**Disaster Response** |
| | | | Radio-Aids to Navigation | Radionavigation Positioning Services |
| | | | Ice Operations | Polar Search & Rescue<br>Icebreaking Services<br>Logistical Resupply<br>Replenishment |
| | | | **Document Vessels** | **Vessel Registration Document** |
| | | | Law Enforcement | Expertise on Boardings & Inspection |

Program requirements:

The following table gives an overview of G-M activities that support the strategic Security goal. The table is designed to show how these activities are related to the law. Most of the activities we perform are authorized or mandated by some form of statute, regulation, or Coast Guard policy. Some of these activities are grounded in all three forms of guidance, while others are simply authorized by Coast Guard generated policy. This information is useful to G-M Program Managers and Operational Commanders for examining the body of base activity we perform in terms of resource availability.

| Program Activity | Source of Requirement or Authorization |
|---|---|
| Manage/ Control Waterways | Authorized by Statute and Regulation |
| Support/Manage Resources | Required by Coast Guard Policy |
| Document Vessels | Required by Statute and Coast Guard Policy |
| Provide Mariner Licensing/Documentation | Required by Statute and Regulation |
| Conduct Inspections/Monitoring | Authorized by Statute and Regulation |
| Incident Response | Required and Authorized by Statute |
| Investigations & Controls/Sanctions | Required and Authorized by Statute |
| Support/Manage Resources | Required by Coast Guard Policy |

Resource Distribution:

Security activities comprise approximately 12% of the Marine Safety & Environmental Protection program budget, or $107.1 million. This information is based on labor survey data from the Activity Based Cost Management (ABCM) study of 1998. This includes activity distribution information based on a pilot project at two field units. It does not account for the different distribution of activity costs that exists at Coast Guard Headquarters, or at Headquarters units. The Headquarters and other staff elements activity dictionary is currently in the revision and improvement stage, and will be validated later in the study.

FY2001 funding profile for activities shown below reflects OE and AC&I budget authority. Figures are expressed in millions of dollars.

| Activity | Sub-Activity | Task | Funding Profile |
|---|---|---|---|
| **Incident Response** | Receive Incident Notification | Receive Pollution Incident Notification<br>Receive Casualty Incident Notification<br>Receive SAR Incident Notification | $2.1 |
| | Conduct Initial Assessment | Conduct Initial Pollution Assessment<br>Conduct Initial Casualty Assessment<br>Conduct Initial SAR Assessment | $4.3 |
| | Activate Response | Activate Pollution Response<br>Activate Casualty Response<br>Activate SAR Response | $11.1 |
| **Investigations & Controls / Sanctions** | Conduct Investigation | Conduct Casualty and Personnel Actions Investigation<br>Conduct Marine Violation Investigation<br>Conduct Pollution Investigation | $6.7 |
| | Document Investigation | Document Casualty Investigation<br>Document Marine Violation Investigation<br>Document Pollution Investigation | $5.1 |
| | Generate Sanction/Control Action | | $2.0 |
| | Conduct Drug and Alcohol Program Inspection (DAPI) | | $0.5 |
| **Conduct Deterrence and Detection Activities** | Conduct Patrol | | 2.1 |
| | Gather & Disseminate Intelligence | | 1.6 |
| **Conduct Inspections / Monitoring** | Conduct Facility Inspection | | $2.9 |
| | Conduct Container Inspection | | $1.0 |
| | Conduct Explosive Handling Supervision | | $0.7 |
| **Manage / Control Waterways** | Evaluate Traffic | | $1.7 |
| | Advise Transiting Mariners | | $0.9 |
| | Coordinate River Traffic/VTS | | $1.1 |
| | Evaluate Marine Event Application | | $0 |
| | Conduct Routine ATON Inspection and Maintenance | | $0 |
| | Conduct Preventative ATON Actions | | $0 |
| | Conduct ATON Discrepancy Response | | $0 |
| | Conduct WAMS | | $0 |
| | Perform Icebreaking Activities | | $0 |
| | Provide Communication Service | | $0.3 |
| **Support / Manage Resources**[3] | Manage Resources | Manage Human Resources<br>Manage Financial Resources<br>Procure Material<br>Manage Information Systems Resources<br>Manage Property | $25.7 |
| | Perform Command Duties | Prepare / Deliver Public Outreach<br>Respond to Inquiries / FOIA Requests<br>Develop Policy & Regulation Guidance<br>Develop / Exercise Plans<br>• Develop / Exercise Contingency Plans<br>• Develop / Exercise Strategic / Military Readiness Plans | $37.7 |
| **Document Vessels** | Document Vessels | | $1.0 |

[3] This activity will presumably be expanded after review and validation of the Headquarters and staff elements activity dictionary.

## *b. Specific Performance Goals*

Past Performance and Analysis

**SEC-1: By 2005, the vulnerability of the Marine Transportation System (MTS) to intentional harm from military, criminal, or terrorist acts will be rated at no higher than "medium."**

**Measure A**: Percent of strategic ports rated at or below "medium" vulnerability.
**Measure B**: Percent of all other ports rated at or below "medium" vulnerability.
**** This information is not currently available. ****

**SEC-2: By 2005, monitor the location and operation, in U.S. waters, of 100% of vessels identified by the NSC and DOD as security threats.**

**Measure:** Number of SIVs detected before they reached port.
**** The information used in this measure is classified. ****

**SEC-3: By 2005, reduce the vulnerability to terrorism of U.S. citizens on passenger vessels and in terminals to no higher than "low."**

**Measure A:** Percent of foreign terminals rated at "low" vulnerability.
**Measure B**: Percent of domestic terminals rated at "low" vulnerability.
**Measure C**: Percent of vessels rated at "low" vulnerability.
**** This information is sensitive, and therefore, will not be published externally. ****

**SEC-4: By 2005, achieve national readiness level of C2 for Commander-in-Chief (CINC) Military Environmental Response Operations (MERO) support.**

**Measure:** Percent of units at, or better than, a readiness level of C2.
**** This information is not currently available. ****

**SEC-5: By 2005, achieve a readiness level of C2 in interdiction and consequence management responsibilities with respect to the use or threat of the use of Weapons of Mass Destruction (WMD).**

**Measure A**: Percent of units rated at, or better than, a readiness level of C2 for interdiction. **Measure B**: Percent of units rated at, or better than, a readiness level of C2 for consequence management.
**** This information is not currently available. ****

### *c. Areas of Emphasis*

## HOMELAND SECURITY/WMD

**Strategic Goal:** MTS is secure from traditional, asymmetrical and criminal threats.

**Background and Analysis:**
Changes in the world environment, political, military, economic and environmental as well as changes to the American public's national expectation, requires the Coast Guard to reassess our national security posture. Two reports address these issues specifically: (1) the MTS Report submitted to Congress in Sept 1999, and (2) the Report of the President's Interagency Commission on Crime and Security in U.S. Seaports, . These reports, along with the Oceans Report, will be our blue print for meeting the future challenges.

With reduced bases overseas instead of forward presence we now rely on force projection. The ability to move people and material to a theatre of operations quickly depends on keeping the seaport of embarkation open and functional. In addition, we must be able to protect our naval assets while they are in port and moving out to sea. The Coast Guard is responsible for port security. But we lack the resources and have lost much of our expertise in port security. Many COTP's believe they will use the PSU's to fill this gap. However, a PSU is part of the NCW force package and belongs to the CINC. In many cases they will not be available. PSU's, if available, lack the training to complete in CONUS law enforcement.

There is a growing interest and understanding of the threats of our Homeland. A recent WMD exercise involved players at the highest levels of the Federal government.

Technology and the world economy have shrunk the globe. This poses new and very real threats to the homeland of the United States that are not easily or effectively countered solely by traditional military power. Thus, it is appropriate to focus significant attention to strengthening our homeland security efforts without impeding economic activity. This requires an unprecedented level of multi-agency cooperation from the military, law enforcement and intelligence communities at every level of government as well as strong international and private sector partnerships.

Domain awareness is a critical part of our homeland security efforts because it helps mitigate the risk of threats penetrating our borders at the same time it provides transparency to a complex array of economic and other activities that occur daily at our land, maritime, aerospace and cybernetic borders. The system must be designed to improve economic throughput, while ensuring border security. It must also enlist interagency and international cooperation. This requires a system of incentives for those who cooperate in partnership and disincentives for those who do not. Everyone has a stake in its success.

**Industry Trends:**
Threats now and in the future will be transnational in nature, these include asymmetric or unconventional attacks which may be state or non state sponsored, smuggling of narcotics or undocumented aliens, smuggling of chemical, biological and radiological devices as well as WMD. The trend is for trade to double over the next decade. With the increase in waterbone trade, detection of illegal contraband within containers aboard ships and at facilities is becoming increasingly difficult to nearly impossible.

**Strategies for Improvement:**

1. Defining and implementing homeland security strategy for the Coast Guard and influence its use by others (NAVY); stake out the Coast Guard role…a natural fit for us.
2. Improve security capability and readiness at U.S. ports
3. Acquire funding and resources
4. Implement Graham Commission recommendations – Coast Guard is the lead port security agency and chairs the security subcommittee under the interagency working group of the MTS.

**Core Prevention Activities, Port Security:**

- Biennial facility surveys
- Explosive loading supervision
- Security and Safety Zones
- Harbor patrol
- Special Interest vessel program
- Port Readiness Committees
- Intel gathering/liaison with other LE agencies

**Improvement Activities, Port Security:**

- Develop and execute port vulnerability assessments.
- Review and exercise operational commander's Marine Counter Terrorism Plans.
- Develop security subcommittee under the ICMTS and MTSNAC. (Completed).
- Develop model port for security and have adapted at IMO.
- Develop anti-terrorism training for Coast Guard members.
- Define Coast Guard leadership role in port security.
- Continue work with G-O to develop Maritime Domain Awareness concept.
- Obtain funding and make permanent 6 new billets at the Intel Center to monitor and track all vessels identified as national security risks, as initial foundation for Maritime Domain Awareness.

**Improvement Activities, WMD**

- Define the role of Strike Teams for WMD (chemical) response.
- Procure detection devices for WMD, working with DOD and Technical Support Working Group.
- Purchase Radiation Pagers for Coast Guard members to use while completing inspections of vessels containers to assist with WMD interdiction and prevention,.
- Develop a robust intelligence program to prevent the entry of WMD and counter terrorism.
- Develop and provide first responder awareness training: Field guidance to access.
- Develop sensor and interdiction capability of illegal cargo (import and export).
- Develop security information hub linked to other agency data bases.
- Create International risk-based cargo security program.
- Rejuvenate MARDEZ capability.
- Integrate AIS, advance Notice of Arrival, AMVER, and other information systems into concept of Maritime Domain Awareness.
- Retool SIV program for new threats.

# Protection of Natural Resources

# PROTECTION OF NATURAL RESOURCES

## *a. Broad Overview*

USCG Strategic Goal: Eliminate environmental damage and natural resource degradation associated with all maritime activities, including transportation, commercial fishing, and recreational boating.

G-M Performance Goals:

**PNR-1A:** By 2005, reduce the average annual volume of oil pollution from maritime sources by 20% from the five year average of 4.3 gallons spilled per million gallons shipped to no more than 3.4.

**PNR-1B:** By 2005, reduce the number of collisions, allisions and groundings for all vessels of 1600 gross tons or more by 20% from the five-year average of 524 to no more than 419.

**PNR-2**: By 2005, reduce the number of medium and major oil spills by 20% from the five-year average of 16 spills per billion tons of oil shipped to no more than 13.

**PNR-3**: By 2005, show a reduction in the threat from aquatic nuisance species.

**PNR-4**: By 2005, reduce the amount of vessel-generated plastic and garbage by 20% from the five-year average of 57 pieces per mile of shoreline to no more than 46.

**PNR-5**: By 2005, improve pollution response preparedness by developing and meeting Coast Guard program standards.

**PNR-6**: By 2005, improve pollution response by developing and meeting Coast Guard response standards.

Program Logic Discussion:

The Coast Guard employs two broad strategies to accomplish the goal of protection of natural resources; prevention and mitigation. Coast Guard activities prevent harm to the environment through such actions as regulatory and policy development, boardings and inspections of vessels and facilities to ensure compliance, education, navigational positioning, and communications. When incidents to occur, the strategy shifts to one of mitigating the effects of the incident by minimizing the impacts to the human and natural environment. Mitigation activities include development of contingency planning and exercise standards and regulations, information and coordination support, and incident response including federal oversight and coordination, specialized responses capabilities of the National Strike Force and operational support platforms such as the new coastal buoy tenders. This model shows Marine Safety and Environmental Protection Program activities as compared to all Coast Guard field operations. G-M activities are shown in bold.

| Goal Impact | Outcome | Strategy | Activity | Outputs |
|---|---|---|---|---|
| Protection of Natural Resources | Eliminate environmental damage and natural Resource degradation associated with maritime transportation, fishing, and recreational boating | Prevent | Law Enforcement | Education of Fishermen<br>Patrols and Surveillance<br>Boardings and Citations |
| | | | External Agency Coordination | National Marine Fisheries Service (NMFS)<br>NMFS Education of Fishermen<br>Fisheries management councils<br>Department of Interior |
| | | | Recreational Boating Safety | Recreational Boater Education (Auxiliary)<br>Courtesy Marine Examinations (Auxiliary)<br>ATON Patrols (Auxiliary)<br>State Programs |
| | | | **Conduct Deterrence and Detection Activities** | **Harbor Patrol Service**<br>**Intelligence Information** |
| | | | **Conduct Inspections / Monitoring** | **Completed Vessel Inspection**<br>**Completed Facility Inspection**<br>**Completed Container Inspection**<br>**Explosive Handling Supervision**<br>**Cargo Transfer Monitoring** |
| | | | **Manage / Control Waterways** | **Vessel Transit** |
| | | | **Provide Mariner Licensing / Documentation Oversight** | **Mariner Credentials**<br>**Approved Course** |
| | | | **Support / Manage Resources** | **Policy & Regulation Guidance**<br>**Presentations / Representation** |
| | | | **Document Vessels** | **Vessel Registration Document** |
| | | | Radio-Aids to Navigation | Radio-Navigation Positioning Services |
| | | | Short Range Aids to Navigation | Short Range ATON Positioning Services |
| | | | Search and Rescue | Command, Control, Communications |
| | | | Bridge Administration | NEPA Regulations in Bridge Construction |
| | | | Ice Operations | Polar and International Treaty Enforcement |
| | | Mitigate | External Agency Coordination | Fish and Natural Environment |
| | | | Bridge Administration | Properties/wetlands/historic structures |
| | | | Bridge Administration | Endangered species/Sanctuaries |
| | | | **Incident Response** | **Pollution Response**<br>**Casualty Response**<br>**Disaster Response** |
| | | | **Investigations & Controls / Sanctions** | **Criminal & Civil Penalty**<br>**Letter of Warning**<br>**Suspension & Revocation Proceeding**<br>**Detention Order** |
| | | | **Support / Manage Resources** | **Policy & Regulation Guidance**<br>**Pollution Response**<br>**Casualty Response**<br>**Disaster Response** |
| | | | Law Enforcement | Boardings, Citations, Prosecutions |

Program requirements:

The following table gives an overview of G-M activities that support the strategic Protection of Natural Resources goal. The table is designed to show how these activities are related to the law. Most of the activities we perform are authorized or mandated by some form of statute, regulation, or Coast Guard policy. Some of these activities are grounded in all three forms of guidance, while others are simply authorized by Coast Guard generated policy. This information is useful to G-M Program Managers and Operational Commanders for examining the body of base activity we perform in terms of resource availability.

| Program Activity | Source of Requirement or Authorization |
|---|---|
| Conduct Deterrence and Detection Activities | Authorized by Status |
| Manage/ Control Waterways | Authorized by Statute and Regulation |
| Support/Manage Resources | Required by Policy |
| Document Vessels | Required by Statute and Policy |
| Conduct Inspections/Monitoring | Authorized by Statute and Regulation |
| Incident Response | Required and Authorized by Status |
| Investigations & Controls/Sanctions | Required and Authorized by Status |
| Support/Manage Resources | Required by Policy |

Resource Distribution:

Activities in support of the Human and Natural Environment comprise approximately 38% of the MS and MEP combined budget, or $331.5 million. This information is based on labor survey data from the Activity Based Cost Management (ABCM) study of 1998. This includes activity distribution information based on a pilot project at two field units. It does not account for the different distribution of activity costs that exists at Coast Guard Headquarters, or at Headquarters units. The Headquarters and other staff elements activity dictionary is currently in the revision and improvement stage, and will be validated later in the study.

FY2001 funding profile for activities shown below reflects OE and AC&I budget authority. Figures are expressed in millions of dollars.

| Activity | Sub-Activity | Task | Funding Profile |
|---|---|---|---|
| **Incident Response** | Receive Incident Notification | Receive Pollution Incident Notification<br>Receive Casualty Incident Notification<br>Receive SAR Incident Notification | $9.1 |
| | Conduct Initial Assessment | Conduct Initial Pollution Assessment<br>Conduct Initial Casualty Assessment<br>Conduct Initial SAR Assessment | $17.8 |
| | Activate Response | Activate Pollution Response<br>Activate Casualty Response<br>Activate SAR Response | $46.3 |
| **Investigations & Controls / Sanctions** | Conduct Investigation | Conduct Casualty and Personnel Actions Investigation<br>Conduct Marine Violation Investigation<br>Conduct Pollution Investigation | $20.0 |
| | Document Investigation | Document Casualty Investigation<br>Document Marine Violation Investigation<br>Document Pollution Investigation | $15.3 |
| | Generate Sanction/Control Action | | $5.9 |
| | Conduct Drug and Alcohol Program Inspection (DAPI) | | $1.6 |
| **Conduct Deterrence and Detection Activities** | Conduct Patrol | | $2.7 |
| | Gather & Disseminate Intelligence | | $1.2 |
| **Conduct Inspections / Monitoring** | Perform Vessel Inspection | Conduct Vessel Scheduling<br>Conduct File/Plan Review<br>Conduct Vessel Inspection<br>Document Vessel Inspection<br>Administer Overseas Inspections Program | $55.8 |
| | Conduct Facility Inspection | | $9.6 |
| | Conduct Container Inspection | | $3.1 |
| | Conduct Barge Fleeting Inspection | | $2.2 |
| | Monitor Cargo Transfer | | $0.9 |
| **Manage / Control Waterways** | Evaluate Traffic | | $1.0 |
| | Advise Transiting Mariners | | $5.2 |
| | Coordinate River Traffic/VTS | | $6.8 |
| | Evaluate Marine Event Application | | $0 |
| | Conduct Routine ATON Inspection and Maintenance | | $0 |
| | Conduct Preventative ATON Actions | | $0 |
| | Conduct ATON Discrepancy Response | | $0 |
| | Conduct WAMS | | $0 |
| | Perform Icebreaking Activities | | $0 |
| | Provide Communication Service | | $1.8 |
| **Provide Mariner Licensing / Documentation Oversight** | Schedule Appointments/Receive Applications | | $3.0 |
| | Evaluate Mariner's Application | | $7.9 |
| | Administer Mariner Exams | | $0.9 |
| | Issue License/Document to Mariners | | $5.2 |
| | Collect/Reconcile User Fee | | $2.1 |
| | Develop & Update Exam | | $0.9 |
| | Evaluate/Re-certify Course | | $1.2 |

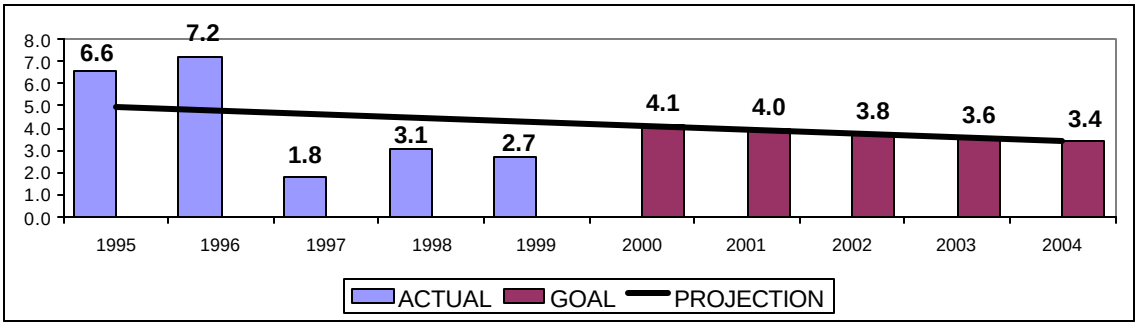
| Activity | Sub-Activity | Task | Funding Profile |
|---|---|---|---|
| **Support / Manage Resources**[4] | Manage Resources | Manage Human Resources<br>Manage Financial Resources<br>Procure Material<br>Manage Information Systems Resources<br>Manage Property | $42.1 |
| | Perform Command Duties | Prepare / Deliver Public Outreach<br>Respond to Inquiries / FOIA Requests<br>Develop Policy & Regulation Guidance<br>Develop / Exercise Plans<br>• Develop / Exercise Contingency Plans<br>• Develop / Exercise Strategic / Military Readiness Plans | $61.7 |
| **Document Vessels** | Document Vessels | | $0.3 |

[4] This activity will presumably be expanded after review and validation of the Headquarters and staff elements activity dictionary.

## *b. Specific Performance Goals*

### Past Performance and Analysis

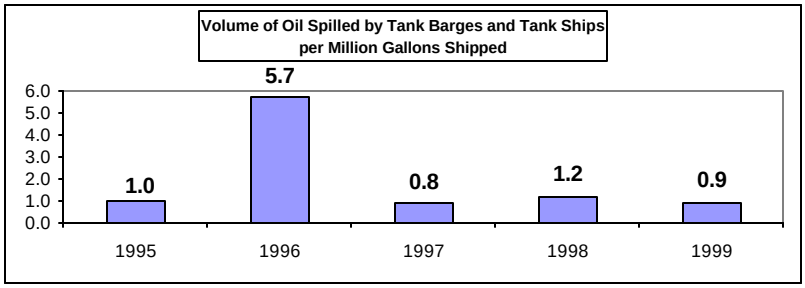
**PNR-1A: By 2005, reduce the average annual volume of oil pollution from maritime sources by 20% from the five-year average of 4.3 gallons per million gallons shipped to no more than 3.4.**

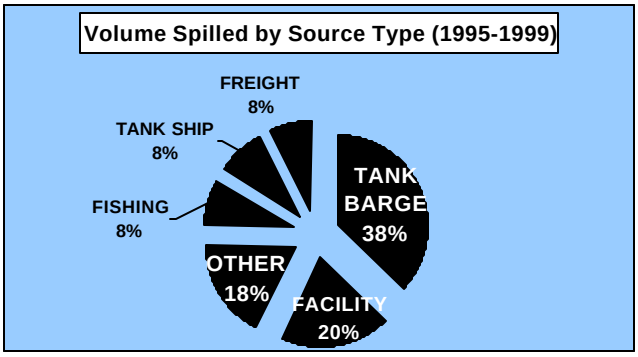



**Measure A**: Volume of oil spilled per million gallons shipped.
**Includes**: Spills into navigable waterways of oil or oil products, reported to CG, & determined to be from a "maritime source". All commercial & recreational vessels, & certain waterfront facilities (waterfront facility, mobile facility, MARPOL reception facility, marina, factory, fixed platform, industrial facility, and shipyard) are classified as maritime sources.
**Excludes**: Spills from undetermined sources, pipelines & OCS platforms. Other vessel & facility sources not typically regulated by CG such as spills from public vessels or facilities.

Data on waterborne shipments of crude oil & petroleum products from USACOE Waterborne Commerce Statistics.

| Fiscal Year | Volume of Oil Spilled (Gal) | Total Volume Shipped (Million Gal) | Gals Spilled per Million Gals Shipped | Goal |
|---|---|---|---|---|
| 1995 | 1760058 | 266694 | 6.6 | |
| 1996 | 2015373 | 280604 | 7.2 | |
| 1997 | 497551 | 277108 | 1.8 | |
| 1998 | 894431 | 289888 | 3.1 | |
| 1999 | 755394 | 282000 | 2.7 | |
| 2000 | | | | 4.1 |
| 2001 | | | | 4.0 |
| 2002 | | | | 3.8 |
| 2003 | | | | 3.6 |
| 2004 | | | | 3.4 |

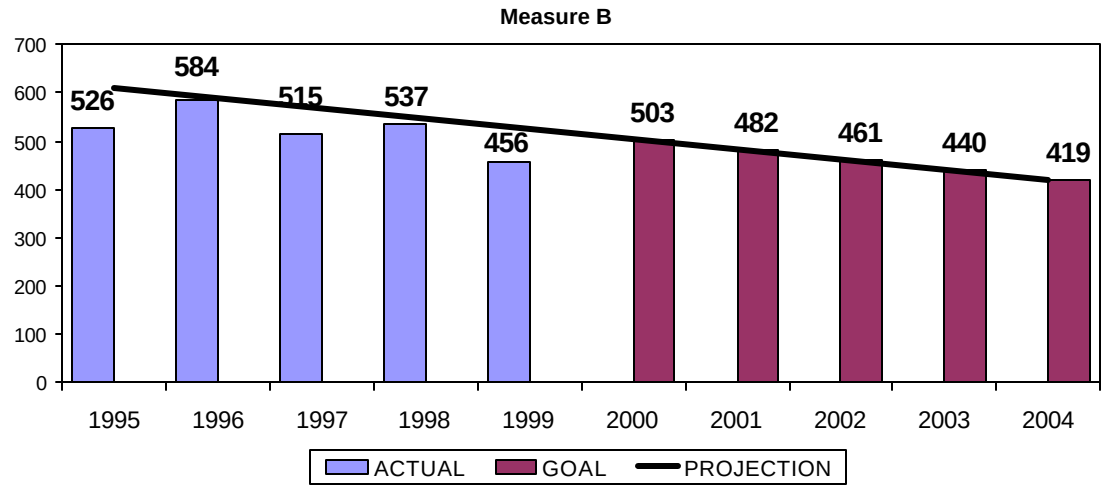



| Volume Spilled by Source Type (1995-1999) | |
|---|---|
| TANK BARGE | 2201481 |
| FACILITY | 1198962 |
| OTHER | 1066878 |
| FISHING | 498930 |
| TANK SHIP | 496142 |
| FREIGHT | 460414 |

## Past Performance and Analysis

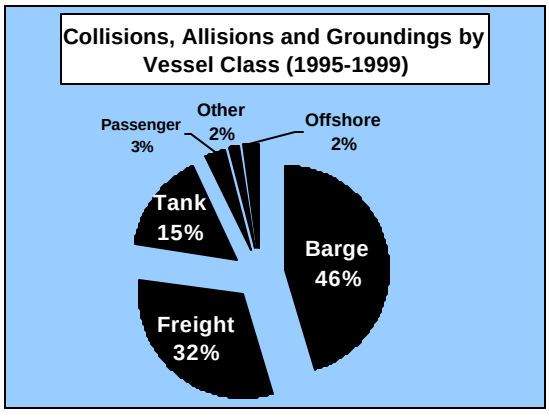
**PNR-1B: By 2005, reduce the number of collisions, allisions and groundings for all vessels of 1600 gross tons or more by 20% from the five-year average of 524 to no more than 419.**




**Measure B**: Collisions, Allisions & Groundings.
**Includes**: All vessels 1,600 Gross Tons or greater involved in a collision, allision or grounding reported to CG. Collisions involving more than one vessel are counted more than once.
**Excludes**: While this measure does not specifically exclude incidents involving public vessels, they are generally not reported / investigated by the Coast Guard

Data on waterborne shipments of crude oil & petroleum products from USACOE Waterborne Commerce Statistics

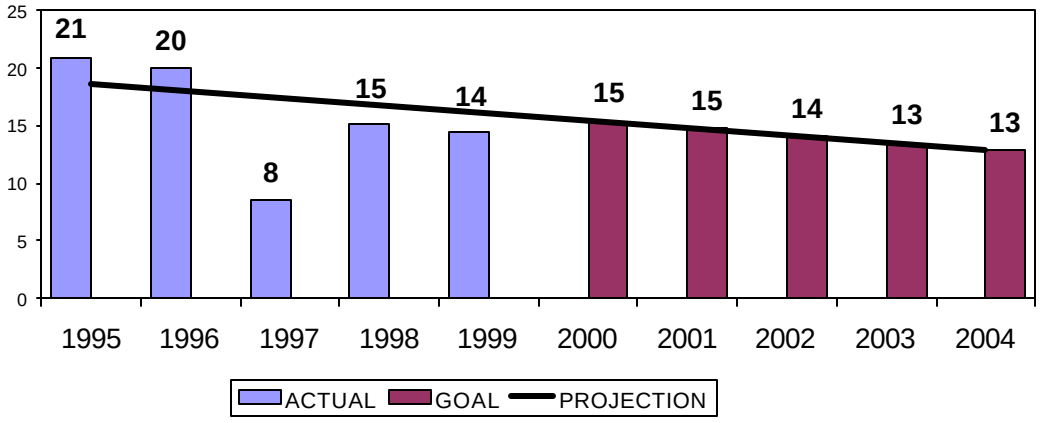
| Fiscal Year | Collisions, Allisions, and Groundings | Goal |
|---|---|---|
| 1995 | 526 | |
| 1996 | 584 | |
| 1997 | 515 | |
| 1998 | 537 | |
| 1999 | 456 | |
| 2000 | | 503 |
| 2001 | | 482 |
| 2002 | | 461 |
| 2003 | | 440 |
| 2004 | | 419 |




| Collisions, Allisions and Groundings by Vessel Class (1995-1999) | |
|---|---|
| Barge | 1185 |
| Freight | 839 |
| Tank | 405 |
| Passenger | 83 |
| Other | 49 |
| Offshore | 41 |
| Fishing | 10 |
| Towing | 5 |

## Past Performance and Analysis

**PNR-2: By 2005, reduce the number of medium and major oil spills by 20% from the five-year average of 16 spills per billion tons of oil shipped to no more than 13.**

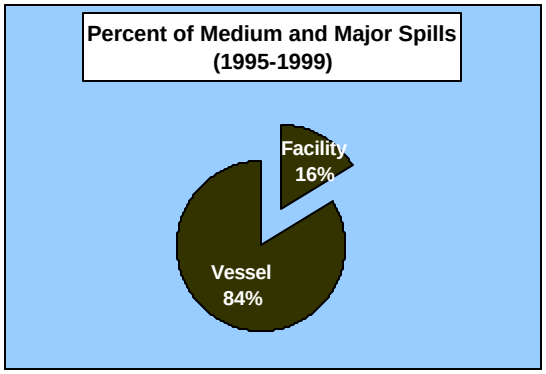


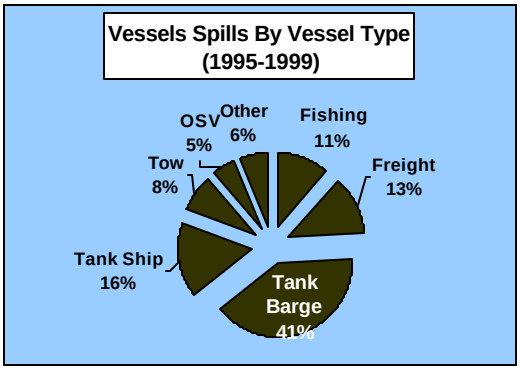

**Includes**: Spills into navigable waterways of oil or oil products, reported to CG, when amount entering waterway is determined to be greater than 10,000 gallons (regardless of whether spill is classified as inland or coastal). Sources are the same as those "maritime sources" included in PNR1A.

**Excludes**: Spills from undetermined sources, pipelines and OCS platforms. Other vessel and facility sources not typically regulated by CG such as spills from public vessels or facilities.

| Fiscal Year | Number of Spills | Total Shipped (Million Tons) | Spills per Billion Tons Shipped | Goal |
|---|---|---|---|---|
| 1995 | 19 | 907 | 21 | |
| 1996 | 19 | 954 | 20 | |
| 1997 | 8 | 943 | 8 | |
| 1998 | 15 | 987 | 15 | |
| 1999 | 14 | 973 | 14 | |
| 2000 | | | | 15 |
| 2001 | | | | 15 |
| 2002 | | | | 14 |
| 2003 | | | | 13 |
| 2004 | | | | 13 |

Data on waterborne shipments of crude oil & petroleum products from USACOE Waterborne Commerce Statistics.



## Past Performance and Analysis

**PNR-3: By 2005, show a reduction in the threat from aquatic nuisance species.**

**Measure A**: Volume of unmanaged foreign coastal ballast water discharged from vessels into the U.S. exclusive economic zone.

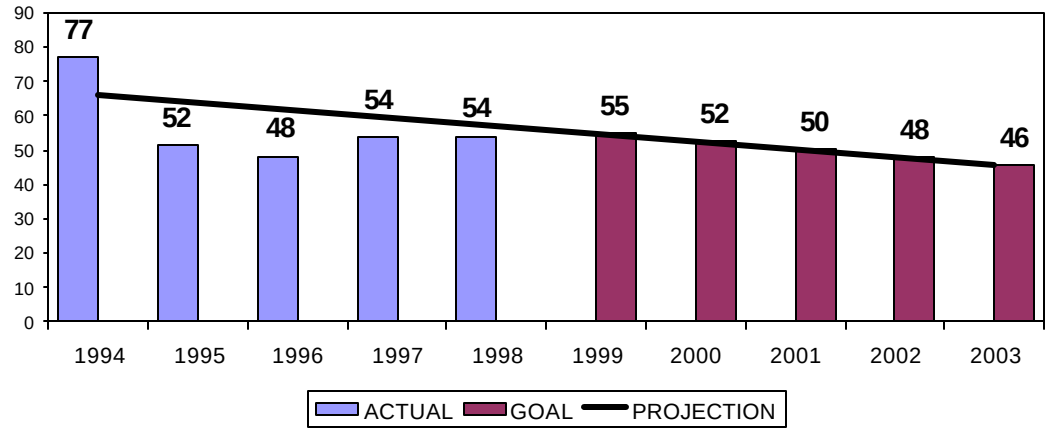
**** This information is not currently available. ****

**Measure B**: Rate of vessels conducting recognized ballast water management practices (e.g., exchange, filtration, or other method).

**** This information is not currently available. ****

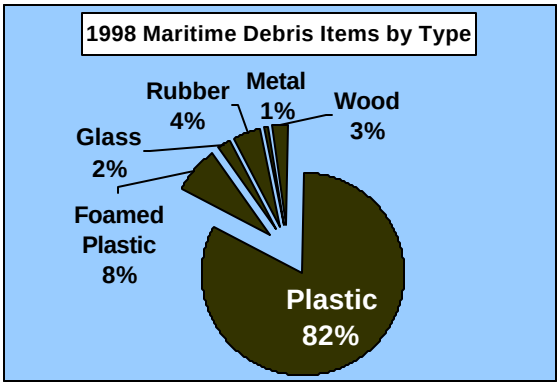
## Past Performance and Analysis

**PNR-4: By 2005, reduce the amount of vessel-generated plastic and garbage by 20% from the five-year average of 57 pieces per mile of shoreline to no more than 46.**




**Includes**: The number of marine debris items collected during Center for Marine Conservation annual beach surveys categorized as from vessel sources.
**Excludes**: Marine debris categorized as being from shoreside sources.

| Fiscal Year | Debris Collected | Miles of Shore Cleaned | Debris per Mile Cleaned | Goal |
|---|---|---|---|---|
| 1994 | 397314 | 5148 | 77 | |
| 1995 | 302708 | 5870 | 52 | |
| 1996 | 286291 | 5930 | 48 | |
| 1997 | 383022 | 7093 | 54 | |
| 1998 | 372694 | 6888 | 54 | |
| 1999 | | | | 55 |
| 2000 | | | | 52 |
| 2001 | | | | 50 |
| 2002 | | | | 48 |
| 2003 | | | | 46 |




| 1998 Number of Maritime Debris Items by Type | |
|---|---|
| Plastic | 307454 |
| Foamed Plastic | 28326 |
| Glass | 8042 |
| Rubber | 15949 |
| Metal | 3275 |
| Wood | 9648 |

## Past Performance and Analysis

**PNR-5: By 2005, improve pollution response preparedness by developing and meeting Coast Guard program standards.**

**Measure**: Percentage of response preparedness ratings that meet prescribed standards.

**** This information is not currently available. ****

**PNR-6: By 2005, improve pollution response by developing and meeting Coast Guard response standards.**

**Measure**: Percentage of response execution survey ratings that meet prescribed standards.

**** This information is not currently available. ****

### *c. Areas of Emphasis*

## POLLUTION PREVENTION AND RESPONSE

**Strategic Goal:** Eliminate environmental damage associated with maritime transportation and operations.

**Background and Analysis:**
The implementation of OPA-90 regulations along with improved international standards and industry efforts, the occurrence of cargo oil spills has significantly declined. Recent trend analyses (5 yr. period) shows a need for additional efforts in the following areas: bunker oil, pipelines, facilities, and tank barges. Additionally, recent incidents from cruise lines have prompted us to dedicate resources to monitor this industry's waste procedures.

**Industry Trends:**
The risk of bunker oil spills is expected to increase as traffic volume increases and freight and passenger vessels increase in size and numbers.

As single hull tankers are phased out, industry is expected to increase their reliance on barges and pipelines; modes with more frequent occurrence of spills.

"Deepwater" offshore production from high-volume facilities will increase.

**Strategies for Improvement:**
Our approach to prevention and response improvement and risk reduction will focus on continuing to minimize the threat of spills from tank vessels and shore-side facilities while shifting resources to reduce the risk of spills from bunker oils, pipelines, off-shore facilities, and tank barges.

1. Maintain core prevention and response programs with adjustments as needed based on available data and further spill/casualty analysis.
2. Lead broad assessment of potential risk of spills from bunker oil, pipelines, offshore operations and hazardous materials, and modify prevention and response programs accordingly.
3. Implement the International Maritime Information Safety System (IMISS) pilot project.
4. Create voluntary near term incentives for pollution prevention measures and response planning while studying the need for new mandatory measures.
5. Lead interagency effort including cruise lines focused on cruise ship pollution prevention measures.

**Core Prevention Activities**

- IMO participation
- Partnerships (AWO, BIMCO, ICCL, Chamber of Shipping, Intertanko, & other)
- Advisory Committees (CTAC, MERPAC, NOSAC, and TSAC)

- Inspections and monitoring (vessels, facilities, containers, barge fleeting, explosive handling, and cargo transfers)
- Education and Outreach Programs
- Inter-organization Coordination (ABS, API, IOSC, Spill Advisory Groups)

**Improvement Activities, Prevention**

- Coast Guard led risk assessment of spill potential from tank vessels, pipelines, bunkers, facilities.
- Evaluate commercial vessel fuel tank outflow.
- Partnership with AWO to identify risks associated with increased barge traffic, and with API & RSPA; identify risks associated with pipelines.
- Partnership with MMS to study risks associated with offshore facilities and FPSOs
- Partner with interagency workgroup addressing cruise industry's waste handling procedures including discharge of sewage and black and gray water. Implement in District 17.
- Create a series of quality incentives for voluntary prevention and response improvement including Port State Control activities. (See Port State Control)

**Core Preparedness and Response Activities**

- National/Regional Response Teams (NRT/RRT)
- Area Contingency Plans, Vessel and Facility Response Plans
- Coast Guard wide Incident Command System implementation.
- Oil Spill Liability Trust Fund/CERCLA Fund
- Partnerships (SCAA/APICOM)
- Preparedness for Response Exercise Program (PREP)
- Spills of National Significance (SONS) exercises.
- Hazwopper Training

**Improvement Activities, Preparedness and Response**

- Conduct Regional Listening Sessions as needed based on broad risk assessments and results from National Listening Session.
- Evaluate need for response plan requirements for freight and passenger vessels.
- Complete / Submit LCP for Vessel Response Plans for non-tank vessels.
- Deliver “Best Response" & preparedness measures framework ensuring optimum use of Area Committees.
- Sharpen National Strike Force’s unique skills to backfill in significant incidents.
    - Optimize National Response System potential of equipment, infrastructure, expertise.
    - Partner with SCAA/APICOM to identify operational improvements and spill response.
    - Assess adequacy of current response “posture” and techniques, need for new/innovative approaches.
    - Create a series of quality incentives for voluntary prevention and response improvement.
    - Refine salvage and fire-fighting requirements based on proposed rule making to be implemented in FY01
    - Standardize contracting for OSROs.

# AQUATIC NUISANCE SPECIES

**Strategic Goal:** Reduce the threat to the marine environment from introduction and translocation of Aquatic Nuisance Species (ANS).

## Background and Analysis:

The spread of ANS, typically introduced to our waterways through ship ballasting operations, is a growing national problem. Once introduced, many of these species are capable of disrupting native ecosystems, resulting in lost natural resources and costing billions of dollars to mitigate.

In addition to the mandatory ballast water exchange program for vessels entering the Great Lakes and Hudson River, the Coast Guard published voluntary ballast water management regulations covering all other U.S. coastal waters which took effect on July 1, 1999. The three key elements of the guidelines are: all vessels entering U.S. waters after having operated outside the Exclusive Economic Zone (200 miles) are required to submit a ballast water management report. These same vessels are asked to conduct a mid-ocean ballast water exchange prior to entering U.S. waters; and, all vessels are asked to take a number of voluntary operational precautions to reduce the spread of non-indigenous species.

## Industry Trends:

Increased global shipping traffic will result in an increased risk of ANS. States are showing an increased interest in passing legislation designed to control the spread of ANS. Some coastal states (e.g. California, Washington and Maryland) have enacted legislation to regulate ballast water from ships. Other states, including Michigan, are at various stages of the legislative process. States are increasingly taking steps to influence the federal government, especially with regard to the research and development of technological solutions. Additionally, the 1996 Aquatic Nuisance Species Act will likely come up for re-authorization within the next congressional session.

## Strategies for Improvement:

1. Enforce current mandatory requirements for Ballast Water Exchange.
2. Monitor the level of compliance with voluntary Ballast Water Exchange standards.
3. Fully engage in research and development efforts on new technology and management procedures for preventing the introduction of non-indigenous species.
4. Partner with federal, state and international stakeholders and governments to develop appropriate solutions.
5. Recommend to Congress by January 1, 2002, future Ballast Water Management voluntary and mandatory programs.
6. Improve Web pages to share info and coordinate efforts.

**Core Prevention Activities**

- Operate the National Ballast Information Clearinghouse for collection & analysis of information regarding compliance with ballast water reporting, practices & ecological studies.
- Monitor and measure compliance and effectiveness of the voluntary guidelines.
- Implement innovative education and outreach programs.
- Enforce mandatory requirements.

**Improvement Activities**

- Assess need for mandatory ballast water management requirements and underlying resource requirements.
- Test and evaluate alternative ballast water treatment and management technologies.
- Give particular emphasis to the issue of vessels that declare "No Ballast On Board" (no pumpable ballast water or sediments).
- Support regional efforts to address ballast water concerns, playing an active role in the Aquatic Nuisance Species Task Force.
- Participate in the development of international instruments on ballast water management through the IMO.
- Develop a program of potential ballast Water Management incentives.
- Conduct joint Coast Guard/Environmental Protection Agency listening sessions. (Completed)
- Proactively seek out and work with States that have a concern with Ballast Water Management issues.
- Report to Congress by January 1, 2002, the results of the foregoing effort and recommend the elements of a comprehensive future ANS program.

# Maritime Mobility

# MARITIME MOBILITY

## *a. Broad Overview*

USCG Strategic Goal: Facilitate maritime commerce and eliminate interruptions and impediments to the economical movement of goods and people, while maximizing recreational access to and enjoyment of the water.

G-M Performance Goals:

**MM-1:** By 2005, maximize vessel mobility within ports and waterways by reducing the number of waterway closures.

**MM-2:** By 2005, reduce the number of vessel collisions, allisions and groundings from the five-year average of 2458 to no more than 1966.

**MM-3:** By 2005, show a reduction in the economic impact of mobility impediments.

Program Logic Discussion:

Mobility efforts aim to ensure that our nation's waterways are capable, accessible, available, and reliable at meeting the nations maritime commerce and recreational needs. Coast Guard mobility related activities include traffic management and aids to navigation. The goals of safety and protection of the natural environment closely complement the goal of mobility -- we aim to optimize the movement of goods and people while minimizing safety and environmental impacts. The Coast Guard employs two strategies in advancing maritime mobility. First, we aim to provide a system whose capacity and accessibility supports both commerce and recreational use. We do this through infrastructure design and investment as well as through policy and regulatory architecture. Second, we aim to maintain high system performance, availability, and reliability. We do this through navigation system services, ice operations, vessel inspections, merchant mariner licensing, bridge administration and recreational boating programs. When incidents threatening mobility do occur, incident response activities aim to restore the waterway as soon as possible to minimize disruptions. The following model shows activities performed in the Marine Safety and Environmental Protection Program in the context of overall Coast Guard field operations. G-M activities are shown in bold.

| Goal Impact | Outcome | Strategy | Activity | Outputs |
|---|---|---|---|---|
| Maritime Mobility | Facilitate Maritime Commerce and Eliminate Interruptions and Impediments to the Economical Movement of Goods and People, While Maximizing Recreational Access to and Enjoyment of the Waterways | Capacity and Accessibility | Short Range Aids to Navigation | Waterways Mgmt Information System (WAMS)<br>Aid Construction and Renovation |
| | | | **Support / Manage Resources** | **Policy & Regulation Guidance**<br>**Presentations / Representation** |
| | | | Radio-Aids to Navigation | Radionavigation planning and policy<br>RA Construction and Renovation<br>Electronic Position Fixing Regulations |
| | | | Bridge Administration | Bridge Permits/Alterations<br>Bridge Regulations |
| | | | **Manage / Control Waterways** | **Interagency Decisions**<br>**Interagency Action Plans**<br>**Direct User Identification and Quantification of issues**<br>**Vessel Transits** |
| | | | External Agency Coordination | Waterways design (USACE)<br>Waterway Maintenance Projects (USACE, NOAA . . . )<br>Other State and Private Infrastructure Investment |
| | | | Marine Response | Navigation Rules |
| | | | Recreational Boating Safety | Regatta Permit Regulations |
| | | | Waterways Management | Interagency Decisions<br>Interagency Action Plans<br>Direct User Identification and Quantification of Issues |
| | | Availability and Reliability | Short Range Aids to Navigation | Aid Positioning & Servicing<br>Notice to Mariners<br>Light List<br>Marking of Hazards |
| | | | Radio-Aids to Navigation | Information<br>Radionavigation Service and Maintenance |
| | | | Ice Operations | Ice Escort Services, Domestic and Polar<br>International Ice Patrol (IIP)<br>Direct Assistance |
| | | | Search and Rescue | Marine Science Information<br>Communications |
| | | | Bridge Administration | Drawbridge Scheduling<br>Bridge Lighting, Permits and Alterations |
| | | | **Incident Response** | **Pollution Response**<br>**Casualty Response**<br>**Disaster Response** |
| | | | **Investigations & Controls / Sanctions** | **Criminal & Civil Penalty**<br>**Letter of Warning**<br>**Suspension & Revocation Proceeding**<br>**Detention Order** |
| | | | **Conduct Deterrence and Detection Activities** | **Harbor Patrol Service**<br>**Intelligence Information** |
| | | | Recreational Boating Safety | Auxiliary Boating Education and Services<br>Regatta Permits<br>State Programs<br>State & Local Enforcement (NASBLA)<br>Recreational Boater Education through CG Auxiliary |
| | | | External Agency Coordination | State and Local Programs<br>Etiquette of other boaters |
| | | | **Provide Mariner Licensing / Documentation Oversight** | **Mariner Credentials**<br>**Approved Course** |
| | | | **Conduct Inspections / Monitoring** | **Completed Vessel Inspection**<br>**Completed Facility Inspection**<br>**Completed Container Inspection**<br>**Cargo Transfer Monitoring** |
| | | | **Document Vessels** | **Vessel Registration Document** |
| | | | Law Enforcement | Boardings |

Program requirements:

The following table gives an overview of G-M activities that support the strategic Mobility goal. The table is designed to show how these activities are related to the law. Most of the activities we perform are authorized or mandated by some form of statute, regulation, or Coast Guard policy. Some of these activities are grounded in all three forms of guidance, while others are simply authorized by Coast Guard generated policy. This information is useful to G-M Program Managers and Operational Commanders for examining the body of base activity we perform in terms of resource availability.

| Program Activity | Source of Requirement or Authorization |
|---|---|
| Conduct Deterrence and Detection Activities | Authorized by Status |
| Manage/ Control Waterways | Authorized by Statute and Regulation |
| Support/Manage Resources | Required by Policy |
| Document Vessels | Required by Statute and Policy |
| Conduct Inspections/Monitoring | Authorized by Statute and Regulation |
| Incident Response | Required and Authorized by Status |
| Investigations & Controls/Sanctions | Required and Authorized by Status |
| Support/Manage Resources | Required by Policy |

Resource Distribution:

Marine Safety & Environmental Protection activities in support of the Coast Guard's Mobility goal comprise approximately 7% of the MS & MEP budget, or $61.9 million. This information is based on labor survey data from the Activity Based Cost Management (ABCM) study of 1998. This includes activity distribution information based on a pilot project at two field units. It does not account for the different distribution of activity costs that exists at Coast Guard Headquarters, or at Headquarters units. The Headquarters and other staff elements activity dictionary is currently in the revision and improvement stage, and will be validated later in the study.

FY2001 funding profile for activities shown below reflects OE and AC&I budget authority. Figures are expressed in millions of dollars.

| Activity | Sub-Activity | Task | Funding Profile |
|---|---|---|---|
| **Incident Response** | Receive Incident Notification | Receive Pollution Incident Notification<br>Receive Casualty Incident Notification<br>Receive SAR Incident Notification | $0.9 |
| | Conduct Initial Assessment | Conduct Initial Pollution Assessment<br>Conduct Initial Casualty Assessment<br>Conduct Initial SAR Assessment | $1.8 |
| | Activate Response | Activate Pollution Response<br>Activate Casualty Response<br>Activate SAR Response | $4.6 |
| **Investigations & Controls / Sanctions** | Conduct Investigation | Conduct Casualty and Personnel Actions Investigation<br>Conduct Marine Violation Investigation<br>Conduct Pollution Investigation | $3.3 |
| | Document Investigation | Document Casualty Investigation<br>Document Marine Violation Investigation<br>Document Pollution Investigation | $2.5 |
| | Generate Sanction/Control Action | | $1.0 |
| | Conduct Drug and Alcohol Program Inspection (DAPI) | | $0.3 |
| **Conduct Deterrence and Detection Activities** | Conduct Patrol | | $1.2 |
| | Gather & Disseminate Intelligence | | $0.7 |
| **Conduct Inspections / Monitoring** | Perform Vessel Inspection | Conduct Vessel Scheduling<br>Conduct File/Plan Review<br>Conduct Vessel Inspection<br>Document Vessel Inspection<br>Administer Overseas Inspections Program | $8.0 |
| | Conduct Facility Inspection | | $2.2 |
| | Conduct Container Inspection | | $0.5 |
| | Conduct Barge Fleeting Inspection | | $1.1 |
| **Manage / Control Waterways** | Evaluate Traffic | | $0.5 |
| | Advise Transiting Mariners | | $2.6 |
| | Coordinate River Traffic/VTS | | $3.4 |
| | Evaluate Marine Event Application | | $0 |
| | Conduct Routine ATON Inspection and Maintenance | | $0 |
| | Conduct Preventative ATON Actions | | $0 |
| | Conduct ATON Discrepancy Response | | $0 |
| | Conduct WAMS | | $0 |
| | Perform Icebreaking Activities | | $0 |
| | Provide Communication Service | | $0.9 |
| **Provide Mariner Licensing / Documentation Oversight** | Schedule Appointments/Receive Applications | | $0.4 |
| | Evaluate Mariner's Application | | $1.1 |
| | Administer Mariner Exams | | $0.1 |
| | Issue License/Document to Mariners | | $0.7 |
| | Collect/Reconcile User Fee | | $0.3 |
| | Develop & Update Exam | | $0.1 |
| | Evaluate/Re-certify Course | | $0.2 |

| Activity | Sub-Activity | Task | Funding Profile |
|---|---|---|---|
| **Support / Manage Resources**[5] | Manage Resources | Manage Human Resources<br>Manage Financial Resources<br>Procure Material<br>Manage Information Systems Resources<br>Manage Property | $9.3 |
| | Perform Command Duties | Prepare / Deliver Public Outreach<br>Respond to Inquiries / FOIA Requests<br>Develop Policy & Regulation Guidance<br>Develop / Exercise Plans<br>• Develop / Exercise Contingency Plans<br>• Develop / Exercise Strategic / Military Readiness Plans | $13.7 |
| **Document Vessels** | Document Vessels | | $0.3 |

[5] This activity will presumably be expanded after review and validation of the Headquarters and staff elements activity dictionary.

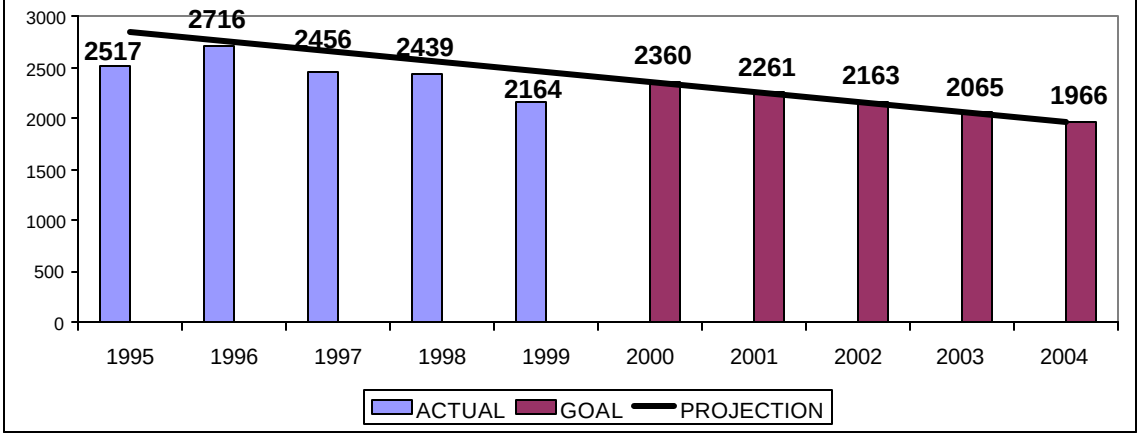
## *b. Specific Performance Goals*

Past Performance and Analysis

| **MM-1: By 2005, maximize vessel mobility within ports and waterways by reducing the number of wateway closures.** |
| --- |
| **Measure**: Number of waterway closures.<br>**** This information is not currently available.**** |

## Past Performance and Analysis

**MM-2: By 2005, reduce the number of vessel collisions, allisions and groundings from the five-year average of 2458 to no more than 1966.**

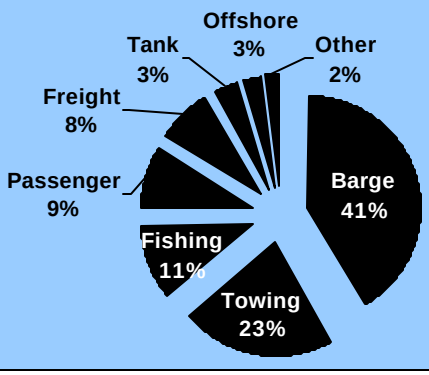



**Includes:** All collisions, allisions and groundings reported to the CG for all commercial vessels. Collisions involving more than one vessel are counted more than once.

**Excludes**: Any recreational vessels involved in a collisions, allisions or groundings. While this measure does not specifically exclude incidents involving public vessels, they are generally not reported/investigated by the Coast Guard.

| Fiscal Year | Collisions, Allisions, Groundings | Goal |
|---|---|---|
| 1995 | 2517 | |
| 1996 | 2716 | |
| 1997 | 2456 | |
| 1998 | 2439 | |
| 1999 | 2164 | |
| 2000 | | 2360 |
| 2001 | | 2261 |
| 2002 | | 2163 |
| 2003 | | 2065 |
| 2004 | | 1966 |

**Collisions, Allisions and Groundings by Vessel Type (1995-1999)**




| Collisions, Allisions, Groundings by Vessel Type (1995-1999) | |
|---|---|
| Barge | 5122 |
| Towing | 2774 |
| Fishing | 1327 |
| Passenger | 1099 |
| Freight | 959 |
| Tank | 424 |
| Offshore | 346 |
| Other | 241 |

## Past Performance and Analysis

| **MM-3: By 2005, show a reduction in the economic impact of mobility impediments.** |
| --- |
| **Measure**: Cost of port delays per year based on standard demurrage rates.<br>**** This information is not currently available. **** |

### *c. Areas of Emphasis*

## MARINE TRANSPORTATION SYSTEM (MTS)

**Strategic Goal:** People and goods are moved on U.S. waterways in a safe, environmentally, sound, secure and efficient manner, keeping pace with maritime traffic growth.

**Background and Analysis:**
In today's global economy, our country remains dependent on our ports and waterways for economic survival. Excluding Mexico and Canada, 95% of our foreign trade and 25% of our domestic trade depends on maritime transportation. More than two billion tons of domestic and foreign commerce worth $1 trillion move through U.S. ports and waterways annually.

**Industry Trends:**
Maritime trade is expected to more than double by 2020. Carriers are deploying increasingly larger container vessels. Larger vessels provide significant economies of scale and allow activity consolidation at designated hub ports on primary trade lanes. The growth in the containership industry and vessel size is driving many harbor improvement projects in the United States. To handle these ships, ports need to provide channel depths of at least 50 feet, cranes that can fully cover their width, highly efficient terminals, and superior inland connections. These changes increase safety and environmental risks and put pressure on the efficiency of the traffic flow.

Similar growth in other commercial (e.g., ferry service, cruise ships, oil and chemical tankers) and recreational traffic are increasing the competition for use of the waterways.

Business naturally seeks out those in the MTS that can provide cost-effective and reliable transportation. Under emerging production, retail, and transportation systems, the delivery of nearly all goods is on a *time-definite* basis; that is, the receivers of products – either manufacturers or retail operations – require that shipments arrive on a certain date and even by a specified time. This time-definite approach requires a high degree of reliability in the transportation system.

**Strategies for Improvement:**
1. Continue and accelerate, core activities;
2. Coordination of government and stakeholder, activity;
3. Adoption of new traffic management technology;
4. Provide decision support tools; and
5. Fund improvement resource needs

**Waterways Management Core Activities:**
- Vessel Traffic Management including:
  - Existing VTS system management
  - VTS/VTIS Public/Private Partnerships
  - Traffic Separation Schemes, Anchorage Regulations, etc

- Port Safety and Port Security including:
  - Harbor Safety Committee facilitation
  - Safety Zones and Marine Events
  - Other COTP functions (see also Security)
- Aids to Navigation (including WAMS)
- Domestic Icebreaking programs
- Bridge Administration programs
- Recreational Boating programs
- Execute MTS Implementation Plan

**Improvement Activities – MTS and Waterways Management:**

External Coordination

- Update MTS Implementation Plan to document results and identify areas for improvement.
- Create MTS Strategic Plan.
- Create National Level Coordinating Committee (Completed).
- Encourage Development of Coordinating Regional MTS Groups.
- Implement results from Regional Dialog Sessions (Completed).
- Encourage the enhancement and expansion of Harbor Safety Committees (NVIC 01-00) (Completed).
- Assess Impact of Oceans Act / Committee.

Internal Coordination and CG WWM Service Delivery

- Create "One-Stop Shopping" for CG WWM functions.
  - Better O & M WWM Coordination – not yet "Internally Aligned and Strategically Focused".
- Identify requirements of Maritime Information Hub (User survey completed).
- Coordinate Interagency Vessel/Cargo inspections to eliminate duplication and maximize efforts.

**Improvement Activities – Vessel Traffic Management:**

- Implement Ports and Waterways Safety System (PAWSS).
- Deliver Automatic Identification System (AIS) to the mariner.
- Establish POISE port safety web site (www.uscg.mil/safeports).
- Partner with other agencies on new systems/common issues of concern:
  - With NOAA on the Physical Oceanographic Real -Time System (PORTS) and air gap sensors.
  - With AWO on Inland Waterway Systems.
  -With ports to develop national and local under Keel Clearance (UKC) Policy.
- Lead effort to expedite delivery of electronic charts and integrated navigation systems.
- Initiate a Legislative Change Proposal to expand opportunities for public/private partnerships and joint operation or funding of VTM initiatives.

**Improvement Activities – Risk-Based Decision Support Tools:**

- Promote risk based decision making by deploying support tolls such as the Ports and Waterways Safety Assessments (PAWSA) program.
- Develop the Waterway Evaluation Tool (WET 2.0) for use by waterway managers.
- Participate in developing and promoting the use of the USACE Facility Siting Permit Risk tool.

# U. S. Coast Guard
# Marine Safety and Environmental Protection

## Business Plan for

## FY2001-2005

# Part III - Regional Strategic Assessment Issues

a. Summary of RSA Issues

b. RSA Issue Papers Index

# SUMMARY OF RSA ISSUES

The Area Commanders submitted a total of 53 Issue Papers, which reflect the top priorities. Of these, 15 contained Marine Safety and Environmental Protection programs issues, which were considered in developing this plan.

| Area | # Issue Papers Submitted | # of Papers containing Marine Safety Issues |
|---|---|---|
| Atlantic | 43 | 8 |
| Pacific | 12 | 7 |

The Marine Safety Program related issues include the following concerns:

**Training**
- Growing demand and increasing complexity of marine inspection requirements demand more sophisticated training.

**Readiness Degradation: Insufficient Personnel**
- Insufficient Personnel and to meet mission demands in marine safety mission areas. (CFVS, ANS Staffing, VST Staffing)

**Readiness Degradation: Turnover and Inexperienced Personnel**
- High turnover rate, inexperienced personnel, and high attrition rates at marine safety units weaken performance given current demands. (VTS watchstanders, Marine Inspectors, Port Safety petty officers)

**Capability: Operational and Intelligence Architecture**
- Deliberate contingency planning demands have overwhelmed staffs. (ICS training, Area Contingency Planning)

**Capability: C4ISR Gaps and Enhancements**
- Limitations in capability to acquire information technology systems. (Vessel monitoring systems, VTS monitoring systems)

**Operations: Commercial Fishing Vessel Safety**
- Fishing vessel safety program efforts not effective at reducing casualty rates.

**Operations: Marine Transportation System**
- Resources and technology not sufficient to address risks posed to MTS by increasing maritime traffic, high capacity and high speed commercial and recreational vessels.

**Operations: National Defense**
- Gaps in PSUs ability to execute national defense missions and operational requirements.

**Aids to Navigation**
- Buoy tenders need funding for oil spill response equipment and associated pollution response training.

**Information**
- Field commanders have only limited ways to access MSIS data.

**Contingency Response**
- Assumption of new weapons of mass destruction (WMD) mission without corresponding resources.

# RSA ISSUE PAPERS INDEX

| Paper Number | Title / Comments |
|---|---|
| | ***AREA ISSUES*** |
| PAC 21-00-1 | READINESS DEGRADATION: Insufficient Personnel – Insufficient Personnel to meet mission demands in marine safety mission areas. (CFVS, ANS staffing, VTS staffing) |
| PAC 21-002 | READINESS DEGRADATION: Turnover and Inexperienced Personnel – High turnover rate, inexperienced personnel, and high attrition rates at marine safety units weaken performance (VTS watchstanders, Marine Inspectors, Port Safety petty officers) |
| PAC 21-00-5 | CAPABILITY: Operational and Intelligence Architecture Deliberate contingency planning demands have overwhelmed staffs (ICS training, Area Contingency Planning) |
| PAC 21-00-6 | CAPABILITY: C4ISR Gaps and Enhancements – Limitations in capability to acquire information technology systems. (Vessel Monitoring Systems, VTS monitoring systems) |
| PAC 21-00-8 | OPERATIONS: Commercial Fishing Vessel Safety – Fishing vessel safety program efforts not effective at reducing casualty rates |
| PAC 21-00-11 | OPERATIONS: Marine Transportation System – Resources and technology not sufficient to address risks posed to MTS by increasing maritime traffic, high capacity and high speed commercial and recreational vessels. |
| PAC 21-00-12 | OPERATIONS: National Defense – Gaps in PSUs ability to execute national defense missions and operational requirements |
| LANT 32-00-02 | TRAINING: growing demand and increasing complexity of marine inspection requirements demand more sophisticated training |
| LANT 32-00-06 | AIDS TO NAVIGATION: Buoy tenders need funding for oil spill response equipment and associated pollution response training. |
| LANT 32-00-07 | INFORMATION: Field commanders have only limited ways to access MSIS data. Lack of standardized institutional process and system to collect valid data to meet demand. |
| LANT 32-00-08 | CONTINGENCY RESPONSE: Assumption of new weapons of mass destruction (WMD) mission without corresponding resources., Major port emergencies and planned marine events. Threat of marine pollution as a weapon. |
| | ***DISTRICT ISSUES*** |
| LANT 05-00-01 | RESTORE THE BASE: Funding gaps is manifesting itself in lowered morale, retention, and overall satisfaction. Workforce and equipment issues are surfacing as the top concerns of operational commanders. |
| LANT 07-00-02 | HIGH SPEED/HIGH CAPACITY PASSENGER VESSEL: Emergence of mega cruise ships are taxing CG resources subsequently impacting our ability to oversee compliance of this industry. |
| LANT 05-00-03 | RESOURCE GAP IN WATERWAYS MANAGEMENT: Resources are inadequate to meet the increasing workload associated with building and maintaining long term relationships in the port community. |
| LANT 08-00-09 | COOPERATIVE TOWING VESSEL EXAMINATION PROGRAM (CTVEP): Billets and funding have not been provided to ensure CTV examination program. Use Fishing Vessel Examiners to implement the CTVE program |

# U. S. Coast Guard
# Marine Safety and Environmental Protection

# Business Plan for

# FY2001-2005

# Part IV - G-M Capability Plan

a. Human Resources

b. Information Resource Management

c. Risk Management

d. Activity Based Cost/Management

e. Partnership and Stakeholder Engagement

# HUMAN RESOURCES

**Goal:** Properly staffed, adequately trained and experienced marine safety workforce that is valued by the organization and responsive to internal and external needs.

**BACKGROUND:** G-M's greatest strength is its people and their commitment to the Coast Guard's core values of honor, respect, and devotion to duty. We have and will continue to assess our workforce needs and are working with G-W in creating innovative solutions to those human resource gaps. This year we deployed some pilot projects (limited scope, limited area) in an effort to find solutions to our HR needs without undermining the larger CG HR system.

## STRATEGIES

- Identify staffing needs (numbers, types, skill sets) to meet mission performance goals.
- Identify gaps in performance (training and experience).
- Develop staffing and development system to align current staffing processes (acquisition and assignments) and remedy performance gaps to meet our program needs.
- Develop and provide a work environment that attracts and retains a high quality, diverse workforce.
- Promote a safe and healthy work environment for marine safety personnel
- Pursue reinvention efforts at one or more units/district.

## OVERVIEW OF ACTIVITIES

- Form a study team (QAT) to address the overarching personnel management issues encircling training, qualifications, and billets at field commands.
- Identify patterns and trends in training/experience. Identify barriers to quick fix and work closely with G-W in implementing long-term solutions.
- Improve Occupational Safety & Health information systems to enable effective OSH management and redesign the CG occupational medical monitoring program (OMMP).

# INFORMATION RESOURCE MANAGEMENT

**Goal:** Meet G-M's critical information needs through IRM initiatives to provide the right information to the right people at the right time.

**BACKGROUND**: In June 2000, we reached an important information milestone with the deployment of Mission Analysis and Planning (MAP) module – a component of the Marine Safety Network (MSN). The Marine Safety Network (MSN) represents G-M's signature information system for the future.

MAP is a decision support system for users throughout the Marine Safety and Environmental Protection Program (and Coast Guard). It consists of two separate pieces; an Executive Information System (EIS), and a Decision Support System (DSS). MAP's EIS provides the capability to quickly and easily analyze marine safety and environmental protection data associated with G-M business goals. MAP's DSS provides the capability to generate sophisticated queries and perform statistical analyses, according to the specific needs. ALCOAST 242/00 announced the deployment of the Mission Analysis and Planning (MAP).

## STRATEGIES

- Continually improve customer/supplier relationships and communications to ensure IRM requirements and critical Information Technology (IT) business solutions are identified, prioritized, developed and managed throughout the life cycle.

- Define Program IT requirements through the use of business analysis and business process reengineering tools.

- Improve the quality and relevance of Marine Safety and Environmental Protection data and emphasize the importance of accurate, relevant information to the long-term health of the Program

## OVERVIEW OF ACTIVITIES

- Mobile Computing in Marine Safety is an ongoing activity at HQ, District and M field units. We will continue to support our customers and stakeholders in the development of new technology such as the Palm OS and it's connectivity with MSN.

- Improve mission performance through data quality; reduce redundant data collection and improve accessibility to performance measurement data.

- Continue to support organizational cultural change through the data quality campaign and ensure IT solutions facilitate rapid and accurate data entry, analysis and retrieval.

# RISK MANAGEMENT

**GOAL:** Establish Risk-Based Decision-Making as a core competency to provide for enhanced decision-making and further progress towards achieving organizational goals.

**BACKGROUND:** Integrating Risk Management into everything we do is critical to our success – both now and in the future. We have, and will continue to have a scarcity of resources. Therefore, we must assess and mitigate the risks associated with accomplishing our goals all levels of the organization. This means globally, regionally and locally in terms of systems, standards and activities that produce the greatest value. Uncertainties (or variabilities) pervade every aspect of the maritime industry from the risk of major loss of life on passenger vessels to a large oil spill, to a terrorist incident in one of our ports, to a major port shutdown. Risk-based decision-making allows these and other uncertainties to be characterized and integrated into activities such as planning, crisis prevention and management. The risk-based decision making methods form a process by which decisions can be made regarding safety, durability, serviceability and compatibility. In short, Risk-based decision-making provides us with the capability for implementing the Commandant's Workload Management philosophy and for optimizing our scarce resources.

## STRATEGIES

- Develop foundation - providing focus for and components of an integrated Risk-Based Decision-Making System.

- Deploy high-quality Risk-Based Decision Making policies and tools to support decision-makers.

- Execute Risk-Based Decision Making Program. Achieve a culture in which appropriate, systematic risk-based decision-making processes are used to aid decision-makers.

## OVERVIEW OF ACTIVITIES

- Provide management direction to use risk; develop training or job-aids necessary to close gap.

- Provide necessary training and job-aids to right people and provide support to units.

- Identify low risk/low value activities for change/divestiture as appropriate. Communicate Risk-Based Decision making value and successes to stakeholders (Congress, industry, public).

# ACTIVITY BASED COST/MANAGEMENT

**Goal:** Link resources and activities to outcomes and performance; implement an activity-based cost management (ABC/M) system to facilitate cost-effective management of Marine Safety and Environmental Protection resources.

**BACKGROUND:** ABC/M will help identify the cost of Marine Safety and Environmental Protection (M) activities. By using information from the activity based cost management system, managers at all levels of the organization will have the necessary information for resource (e.g. people, material, equipment, space, information, appropriated funds) optimization. By coupling risk management and activity-based cost management, we can ensure that activities are managed so as to produce the most value for the lowest cost.

## STRATEGIES

- Using "proof of concept" design from earlier ABC initiatives, implement an activity-based cost/management system to facilitate cost-effective management of M resources.
- Implement/deploy an ABCM system in conjunction with the release of the Marine Safety Network's MSIS field replacement (Spring 2001)
- Provide an ABC/M overview and training for all appropriate personnel in the Marine Safety and Environmental Protection Program to ensure successful implementation.

## OVERVIEW OF ACTIVITIES

- Outline benefits of ABC/M as identifying G-M's activities, processes, and outputs and linking them to outcomes and performance targets.
- Identify/develop G-M "global activity dictionary."
- Design and test user-friendly, web-based tool for collecting and reporting labor cost data
- Coordinate/integrate interfaces between ABC software and MISLE/MAP, and other legacy databases.
- Work closely with anticipated system end users to define the reporting requirements

# PARTNERSHIP AND STAKEHOLDER ENGAGEMENT

**Goal:** Engage partners and stakeholders systematically to achieve common goals.

## BACKGROUND:

Over the past few years we've established formal partnerships with industry organizations, using quality management principles in joint efforts to enhance marine safety and environmental protection in marine operations. The quality movement creates an opportunity for the Coast Guard and industry management to re-define their roles in fostering marine safety and environmental protection. Quality partnerships with maritime managers and workers leverage resources, offer innovative and non-regulatory approaches to problem solving. Formal partnerships have been established with major marine industry associations in the United States including *The American Waterways Operators*, the *Passenger Vessel Association*, the *American Petroleum Institute*, and *Chamber of Shipping*. One of the key aspects of our formal partnership agreements is the established of quality action teams comprised of industry and Coast Guard representatives, who are charged with analyzing data on marine accidents and recommending cost-effective solutions to improve safety. We will continue to expand our partnership efforts as opportunities emerge with other industry leaders.

## STRATEGIES:

- Define and identify partners and stakeholders, and segment them into formal and informal groups as related to G-M performance goals.
- Establish the purpose of stakeholder groups, and establish procedures to be used in managing partnerships.
- Prevention through People (PTP) is a primary strategy of the program that applies a systematic, people-focused approach to reducing casualties and pollution.
- Determine critical success factors for stakeholder engagement, and measures for success.

## OVERVIEW OF ACTIVITIES

- Develop an outreach plan for stakeholder groups that targets specific groups, defines the engagement process, and provides guidelines for implementing the Partnership Capability Goal at the local level.
- On a quarterly basis, review Business Plan to identify areas where stakeholder groups can be used to attain/address strategies and activities
- Develop consensus-based measures of effectiveness and/or customer service standards